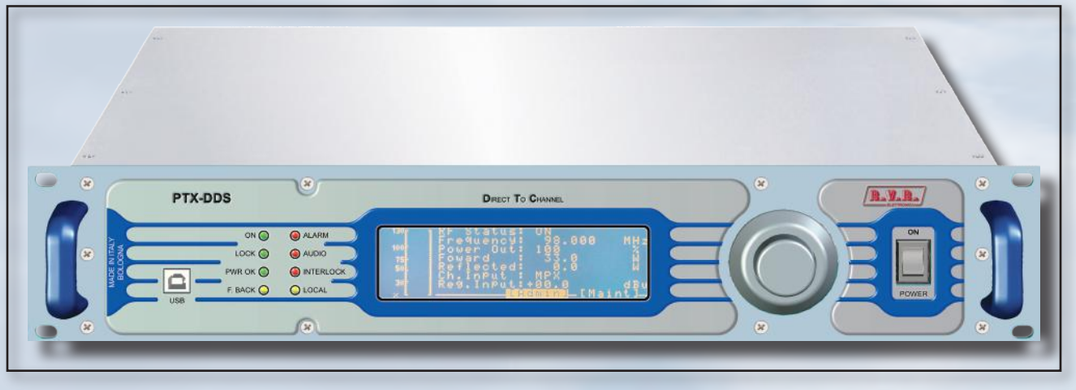
PTX30DDS & PTX100DDS & PTX150DDS

TECHNICAL ANNEX

VOLUME2



Member of CISQ Federation
RINA
ISO 9001:2000
Certified Quality System

BROADCAST EQUIPMENT

Manufactured by R.V.R ELETTRONICA S.p.A. Italy

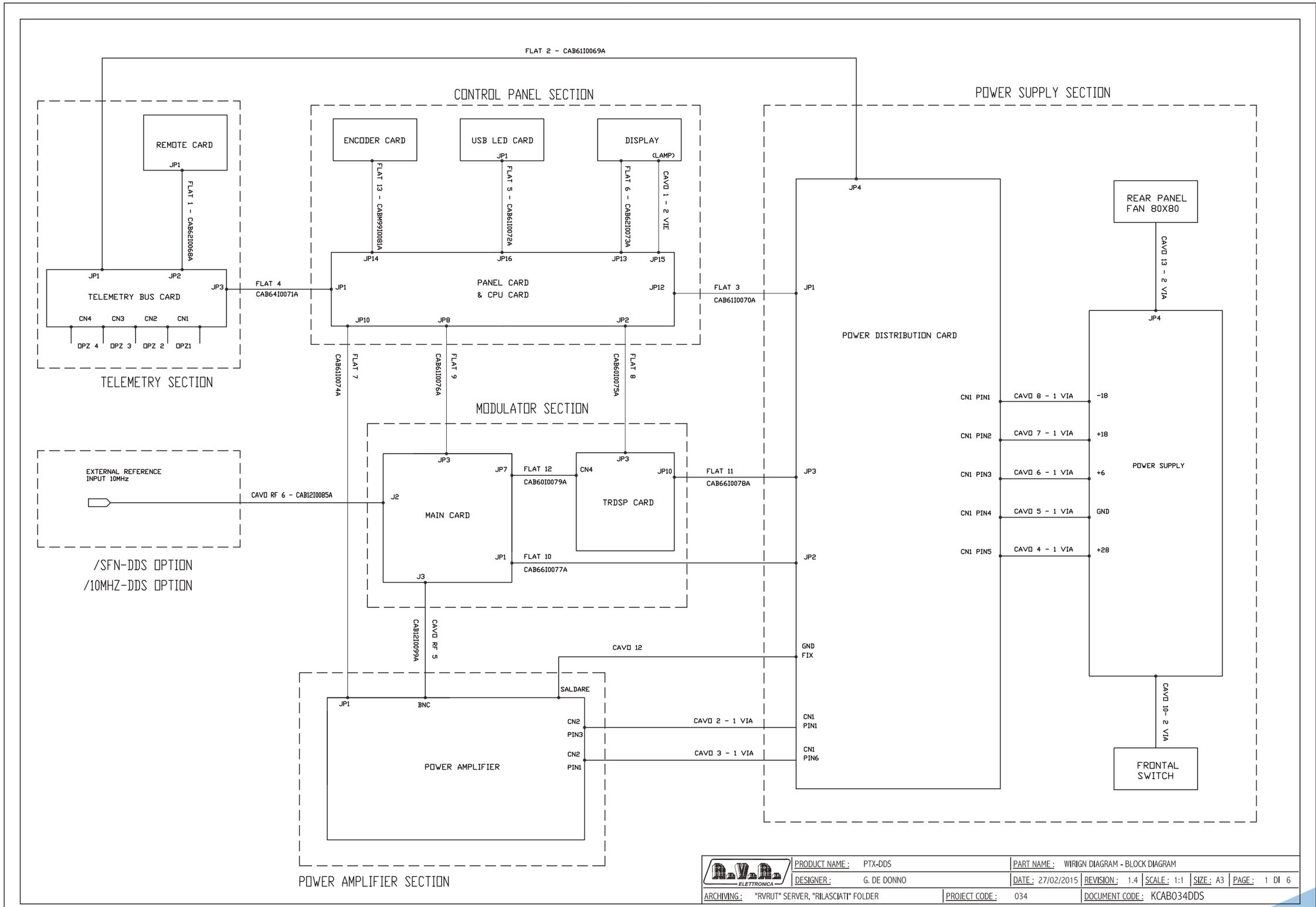
Appendix A Piani di montaggio, schemi elettrici, liste componenti / *Component layouts, schematics, bills of material*

Questa parte del manuale contiene i dettagli tecnici riguardanti la costruzione delle singole schede componenti il PTX DDS. L'appendice è composta dalle seguenti sezioni:
This part of the manual contains the technical details about the different boards of the PTX DDS. This appendix is composed of the following sections:

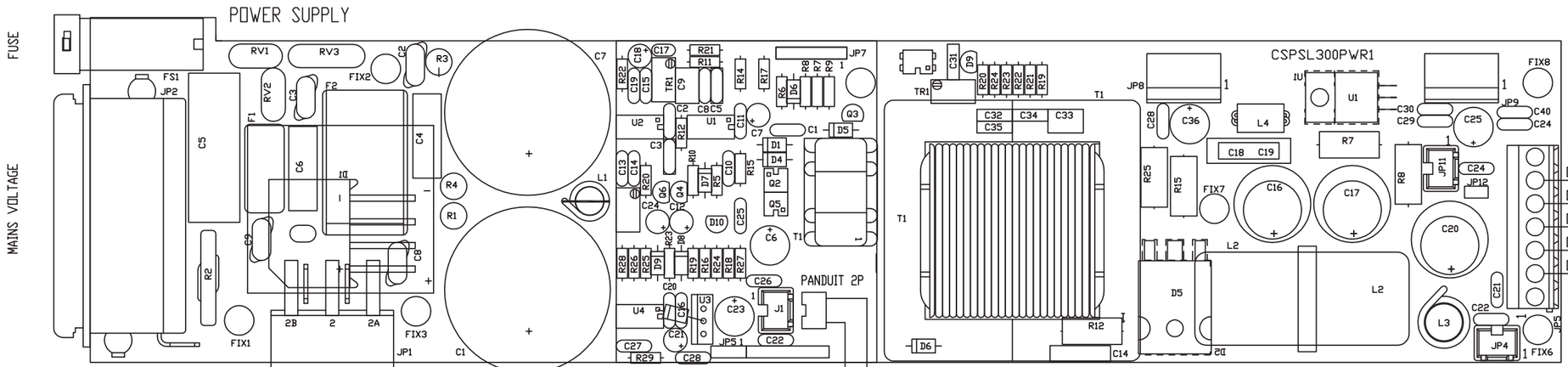
Document History

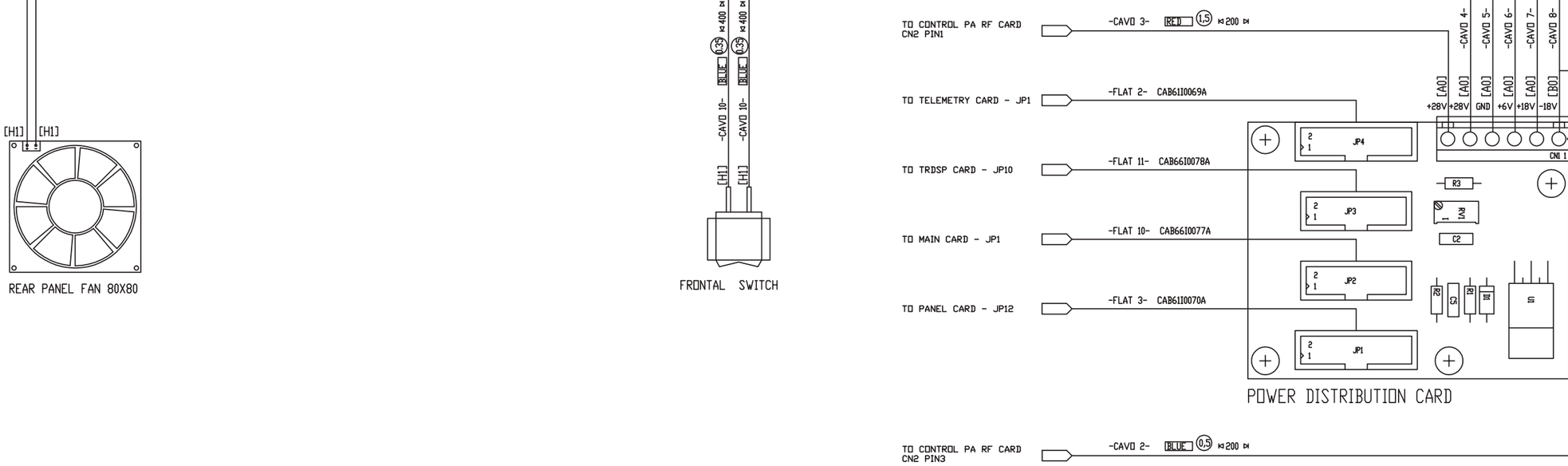
Date	Version	Reason	Code	Editor
27/06/2006	1.0	First Edition	/	J.H. Berti
09/11/2006	1.1	KCAB034DDS, SL034MD1001 and SL034IN2002 Update	RM 5606	J.H. Berti
12/06/2007	1.2	SL034CP1001, SL034UP1001, SL034BI1001, SL034BI2001 and SL034TL1001 Update	RM 6406, 2307, 2607 & mGDD110607	J.H. Berti
27/11/2010	1.3	Major Upgrade	/	J.H. Berti
29/11/2013	1.4	/	/	J.H. Berti
18/09/2014	1.5	Minor Upgrade	/	J.H. Berti

KCAB034DDS


FLAT 2 - CAB61I0069A
CONTROL PANEL SECTION
POWER SUPPLY SECTION
REMOTE CARD
JP1
FLAT 1 - CAB62I0068A
ENCODER CARD
USB LED CARD
DISPLAY
(LAMP)
FLAT 13 - CAB99I0081A
FLAT 5 - CAB61I0072A
FLAT 6 - CAB62I0073A
CAVO 1 - 2 VIE
JP14
JP16
JP13
JP15
JP4
REAR PANEL
FAN 80X80
CAVO 13 - 2 VIA
JP1
JP2
JP3
TELEMETRY BUS CARD
FLAT 4
CAB64I0071A
PANEL CARD
& CPU CARD
JP12
FLAT 3
CAB61I0070A
JP1
JP4
CN4
CN3
CN2
CN1
JP10
JP8
JP2
POWER DISTRIBUTION CARD
OPZ 4
OPZ 3
OPZ 2
OPZ1
TELEMETRY SECTION
CAB61I0074A
FLAT 7
CAB61I0076A
FLAT 9
CAB60I0075A
FLAT 8
MODULATOR SECTION
CN1 PIN1
CAVO 8 - 1 VIA
-18
CN1 PIN2
CAVO 7 - 1 VIA
+18
CN1 PIN3
CAVO 6 - 1 VIA
+6
POWER SUPPLY
CN1 PIN4
CAVO 5 - 1 VIA
GND
CN1 PIN5
CAVO 4 - 1 VIA
+28
JP3
JP7
FLAT 12
CAB60I0079A
CN4
JP10
FLAT 11
CAB66I0078A
JP3
EXTERNAL REFERENCE
INPUT 10MHz
CAVO RF 6 - CAB12I0085A
J2
MAIN CARD
TRDSP CARD
JP1
FLAT 10
CAB66I0077A
JP2
/SFN-DDS OPTION
/10MHZ-DDS OPTION
J3
CAB12I0099A
CAVO RF 5
CAVO 12
GND
FIX
SALDARE
JP1
BNC
CN2
PIN3
CAVO 2 - 1 VIA
CN1
PIN1
CN2
PIN1
CAVO 3 - 1 VIA
CN1
PIN6
CAVO 10- 2 VIA
FRONTAL
SWITCH
POWER AMPLIFIER
POWER AMPLIFIER SECTION
PRODUCT NAME : PTX-DDS
PART NAME : WIRIGN DIAGRAM - BLOCK DIAGRAM
DESIGNER : G. DE DONNO
DATE : 27/02/2015
REVISION : 1.4
SCALE : 1:1
SIZE : A3
PAGE : 1 DI 6
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER
PROJECT CODE : 034
DOCUMENT CODE : KCAB034DDS

KCAB034DDS



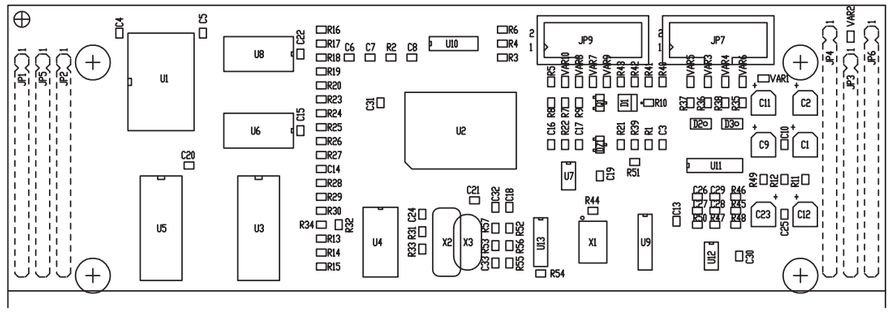


POWER SUPPLY SECTION

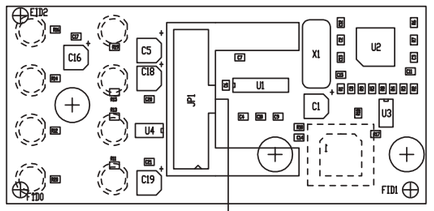
PRODUCT NAME :	PTX-DDS			PART NAME :	WIRIGN DIAGRAM - POWER SUPPLY SECTION	
DESIGNER :	G. DE DONNO			DATE : 27/02/2015	REVISION : 1.4	SCALE : 1:1	SIZE : A3	PAGE : 2 DI 6
ARCHIVING :	"RVRUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE :	034	DOCUMENT CODE :	KCAB034DDS

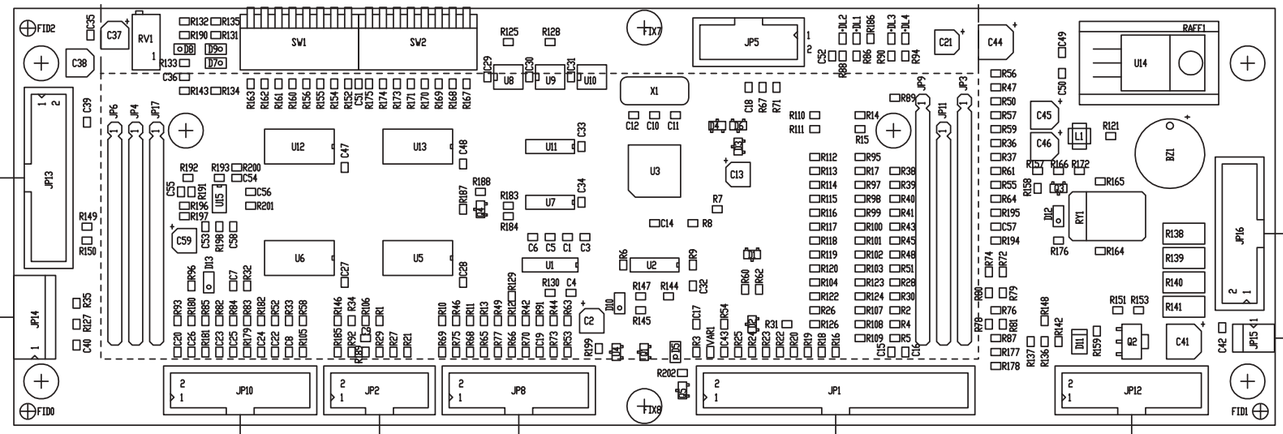
KCAB034DDS

CPU CARD

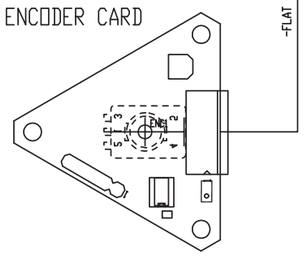


USB LED CARD





ENCODER CARD



CONTROL PANEL SECTION

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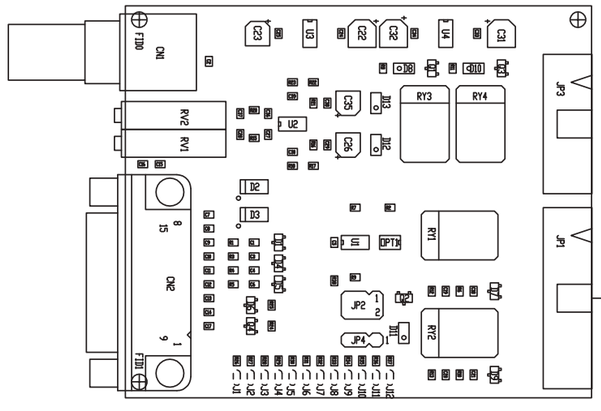
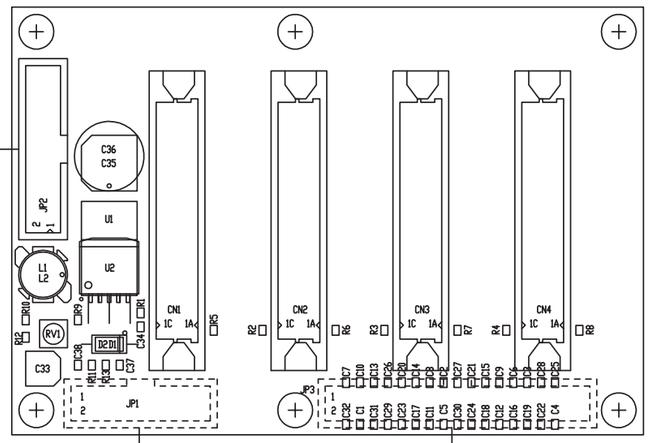
DESIGNER : G. DE DONNO	DATE : 27/02/2015	REVISION : 1.4	SCALE : 1:1	SIZE : A3	PAGE : 3 DI 6	
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE : 034		DOCUMENT CODE : KCAB034DDS		

KCAB034DDS

REMOTE CARD



-FLAT 1- CAB62I0068A



TELEMETRY DISTRIBUTION PANEL

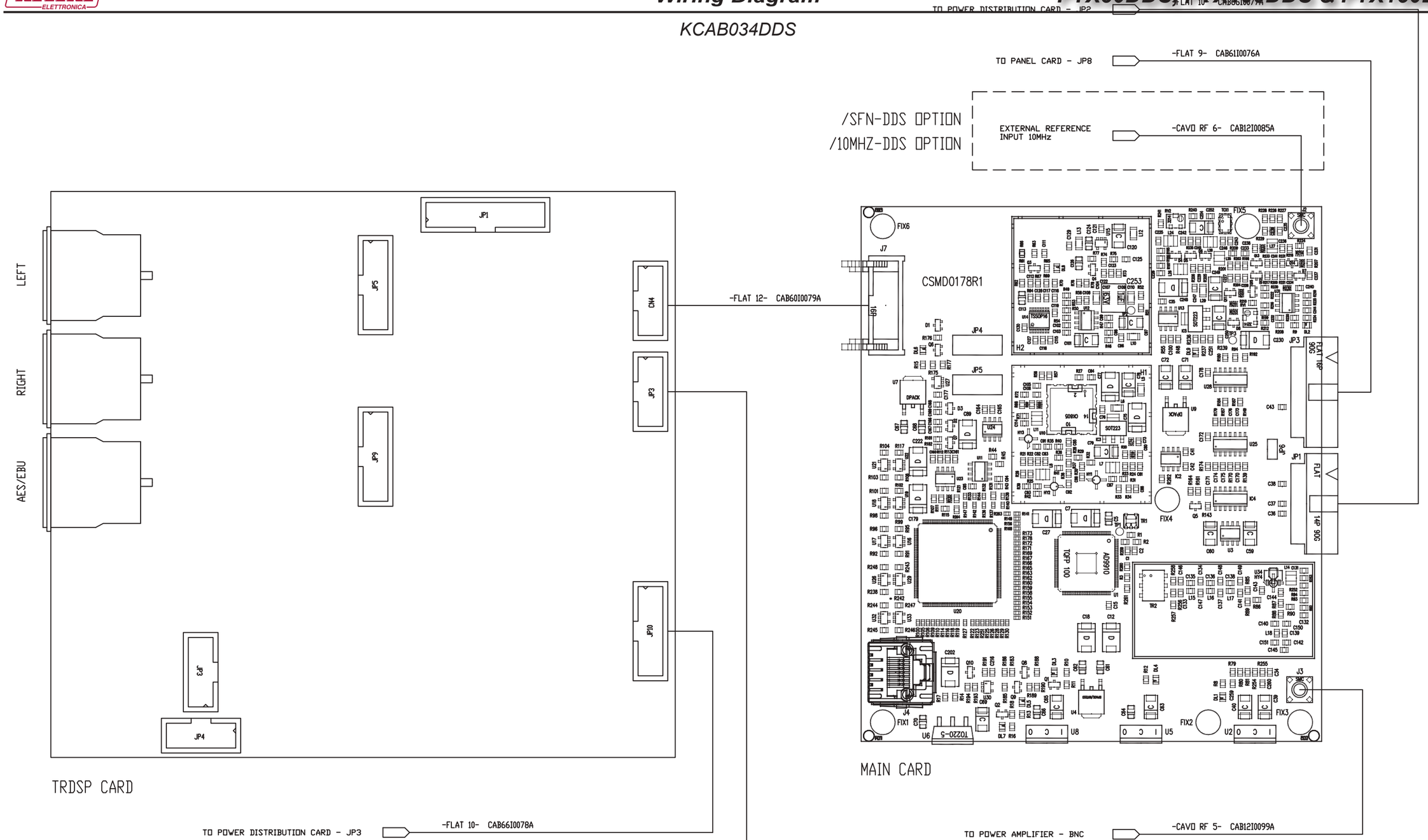
TO POWER DISTRIBUTION CARD - JP4 -FLAT 2- CAB61I0069A

TO PANEL CARD - JP1 -FLAT 4- CAB64I0071A

TELEMETRY SECTION

PRODUCT NAME:	PTX-DDS		PART NAME:	WIRIGN DIAGRAM - TELEMETRY SECTION		
DESIGNER:	G. DE DONNO		DATE: 27/02/2015	REVISION: 1.4	SCALE: 1:1	SIZE: A3	PAGE: 4 DI 6
ARCHIVING:	"RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE: 034	DOCUMENT CODE: KCAB034DDS			

KCAB034DDS



MODULATOR SECTION

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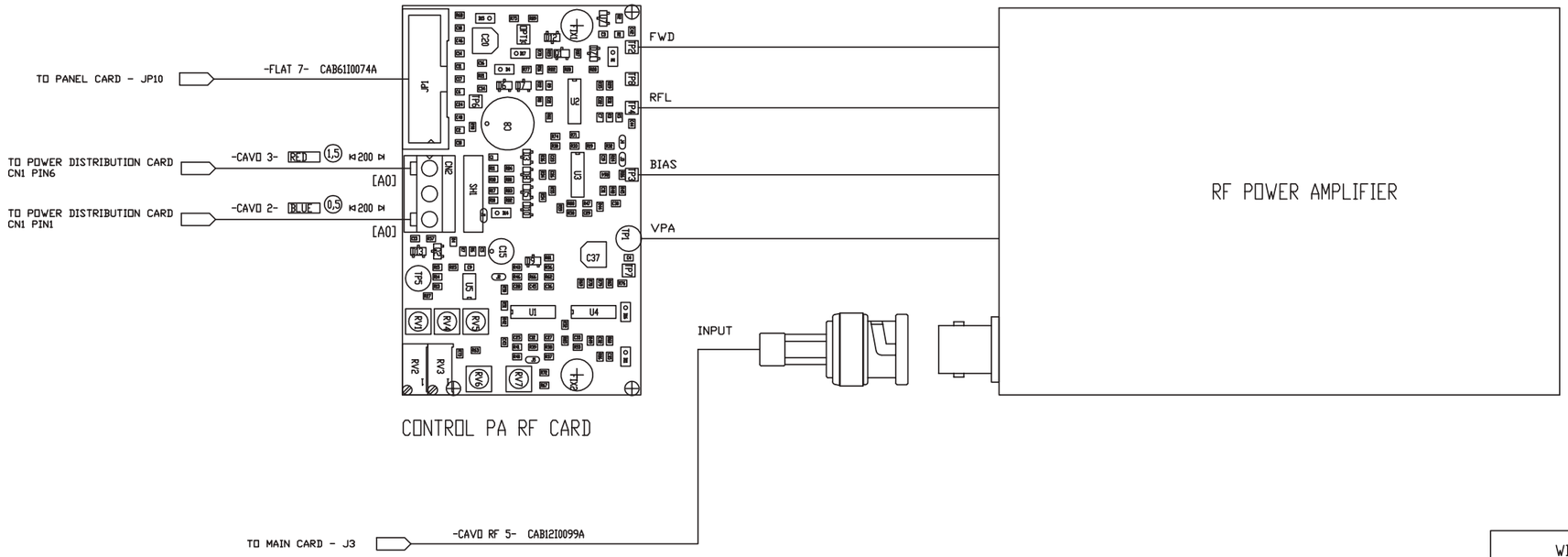
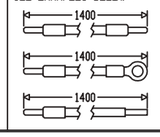
DESIGNER : G. DE DONNO			DATE : 27/02/2015	REVISION : 1.4	SCALE : 1:1	SIZE : A3	PAGE : 5 DI 6
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE : 034		DOCUMENT CODE : KCAB034DDS		

KCAB034DDS



WIRES INFO	
-36-	WIRE IDENTIFICATION # (OPTIONAL)
WHITE	PLASTIC INSULATOR COLOUR
1.5	CONDUCTOR SECTION AREA IN mm^2
⋈1400⋈	LENGTH IN mm SEE EXAMPLES BELOW :

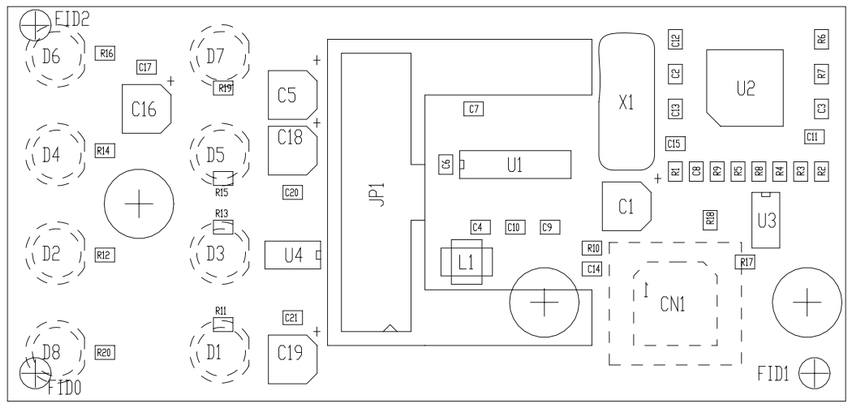


WIRE'S TERMINALS IDENTIFICATION	
TERMINAL IDENTIFIER	TERMINAL TYPOLOGY
[A0]	BOOTLACE FERRULES (SINGLE WIRE)
[B0]	BOOTLACE FERRULES (DOUBLE WIRE)
[H1]	WIRE UNSHEATHED, 5

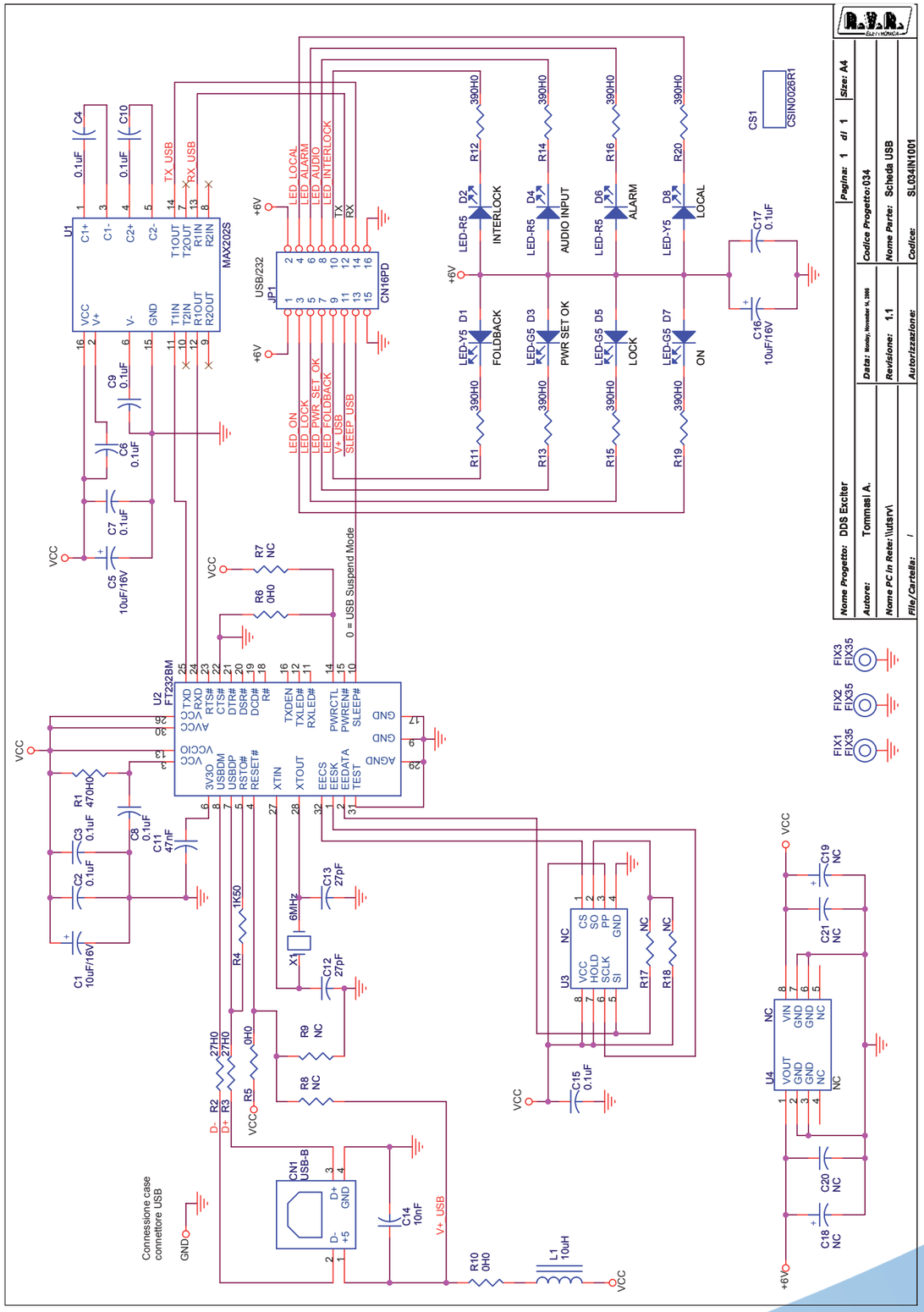
POWER AMPLIFIER SECTION

PRODUCT NAME : PTX-DDS			PART NAME : WIRIGN DIAGRAM - POWER AMPLIFIER SECTION			
DESIGNER : G. DE DONNO			DATE : 27/02/2015	REVISION : 1.4	SCALE : 1:1	SIZE : A3	PAGE : 6 DI 6
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE : 034		DOCUMENT CODE : KCAB034DDS		

SL034IN1001



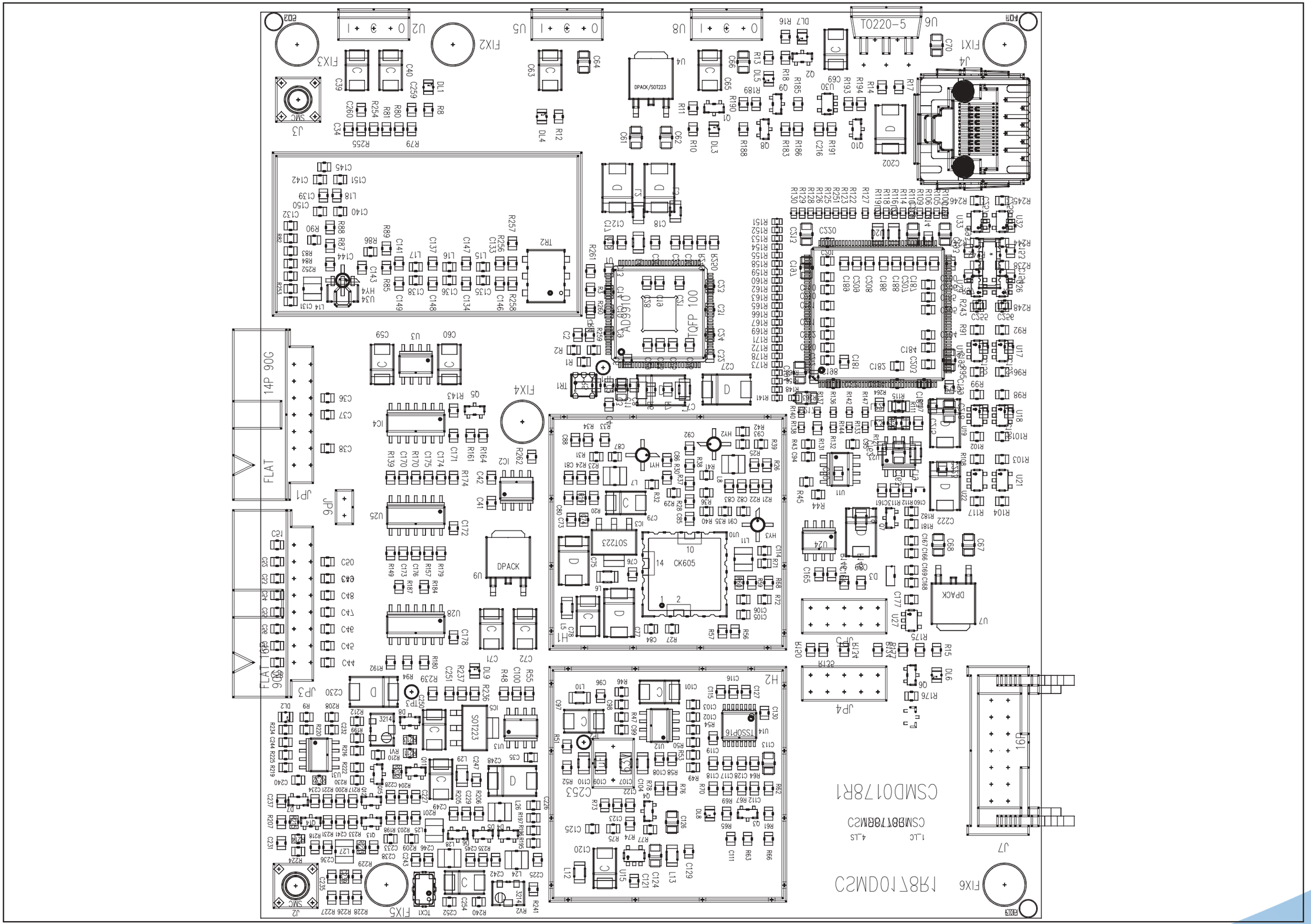
R.V.R. ELETTRONICA	NOME PROGETTO: DDS EXCITER		NOME PARTE: SCHEDA CONNETTORE USB				
	AUTORE: FEDERICO THEI		DATA: 18/04/05	REVISIONE: 1.0	SCALA: 2:1	SIZE: A4	PAGINA: 1 DI 1
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"		CODICE PROGETTO: 034		CODICE DISEGNO: SL034IN1001			
MATERIALE: <>		TRATTAMENTO: <>		PROFILO: <>		STATO: PROGETTUALE	



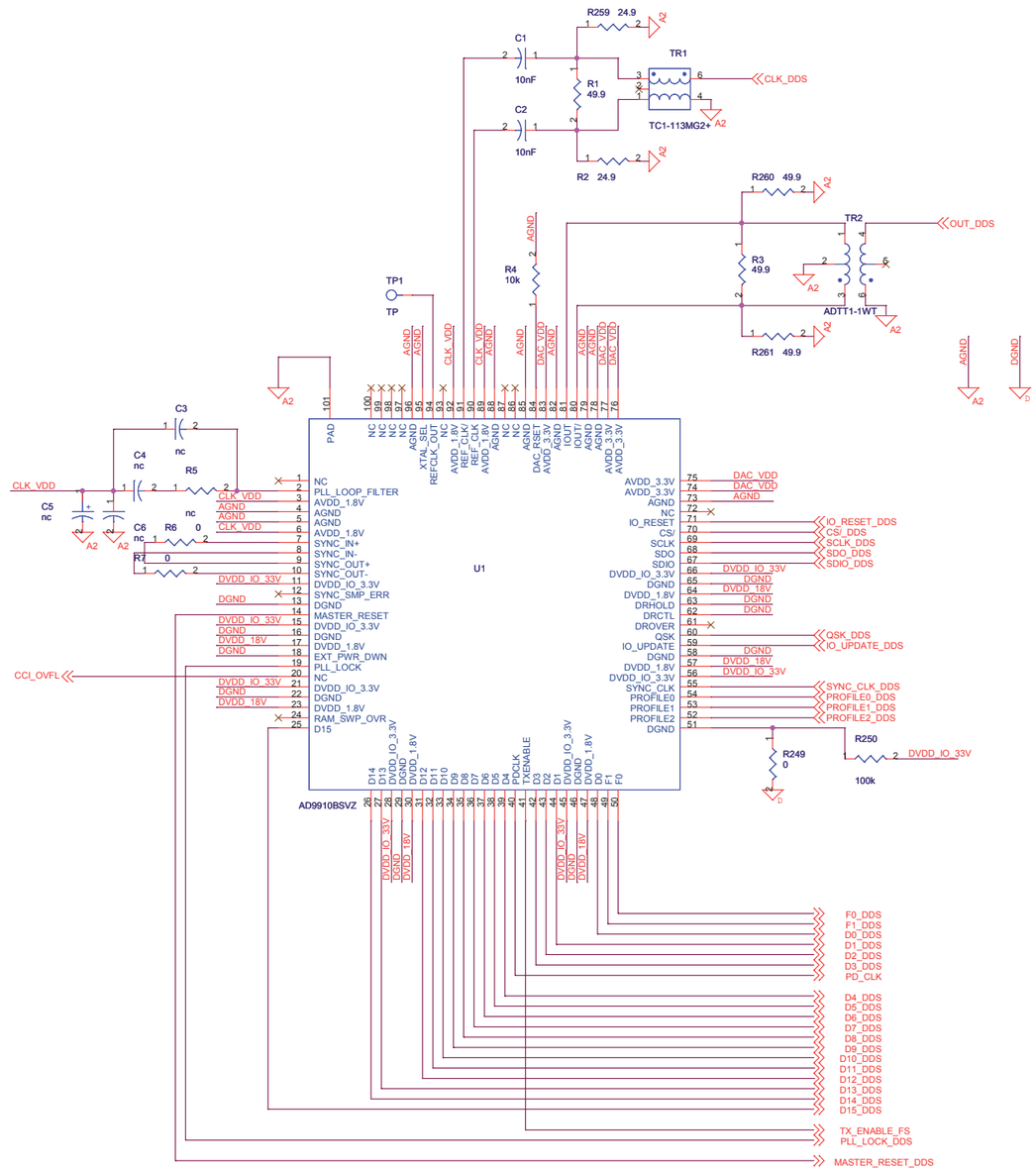
Scheda USB Revised: Friday, November 11, 2005
SL034IN1001 Revision: 1.1
DDS Exciter
RVR034
Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN1	USB-B	Conn. Molex USB B 67265
2	1	CS1	CSIN0026R1	Circuito stampato
3	3	C1, C5, C16	10uF/16V	Cond. Elett. SMD d. 4mm
4	10	C2, C3, C4, C6, C7, C8, C9, C10, C15, C17	0.1uF	Cond. SMD 0805
5	1	C11	47nF	Cond. SMD 0805
6	2	C12, C13	27pF	Cond. SMD 0805
7	1	C14	10nF	Cond. SMD 0805
8	2	C18, C19	NC	Cond. Elett. SMD d. 4mm
9	2	C20, C21	NC	Cond. SMD 0805
10	2	D1, D8	LED-Y5	LED dia. 5mm
11	3	D2, D4, D6	LED-R5	LED dia. 5mm
12	3	D3, D5, D7	LED-G5	LED dia. 5mm
13	3	FIX1, FIX2, FIX3	FIX35	Foro fissaggio 3.5mm
14	1	JP1	CN16PD	Connettore 16 poli Flat cs
15	1	L1	10uH	Ind. verticale SMD dia. 4 p 4.8
16	1	R1	470H0	Res. SMD 0805
17	2	R2, R3	27H0	Res. SMD 0805
18	1	R4	1K50	Res. SMD 0805
19	3	R5, R6, R10	0H0	Res. SMD 0805
20	5	R7, R8, R9, R17, R18	NC	Res. SMD 0805
21	8	R11, R12, R13, R14, R15, R16, R19, R20	390H0	Res. SMD 0805
22	1	U1	MAX202S	RS232 Driver SMD SO16
23	1	U2	FT232BM	SMD USB to RS232 interface
24	1	U3	NC	Serial EEPROM SMD
25	1	U4	NC	Stabilizzatroe SMD SO8
26	1	X1	6MHz	Quarzo SMD HC49SMD

SL174MD1001

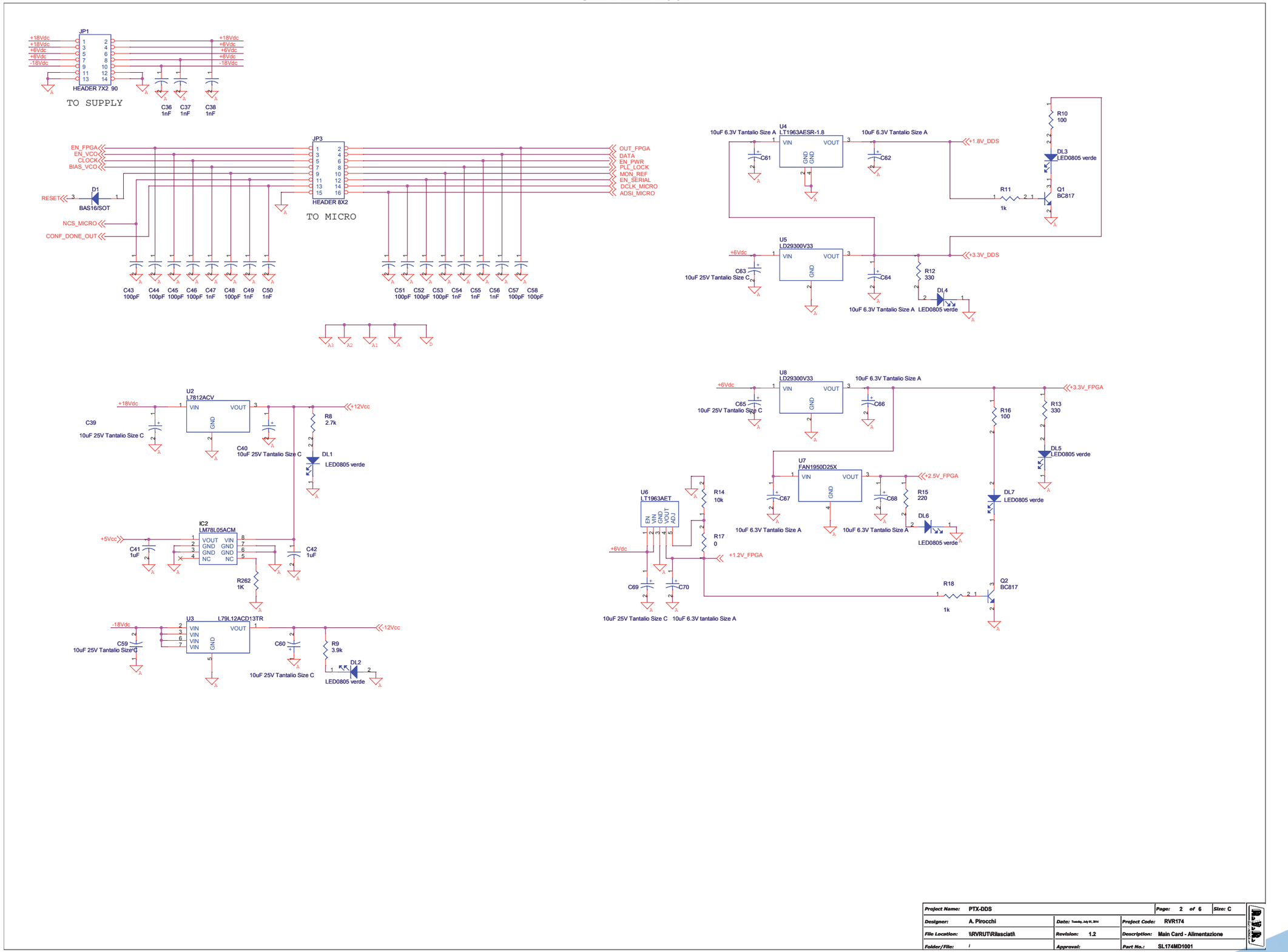


SL174MD1001



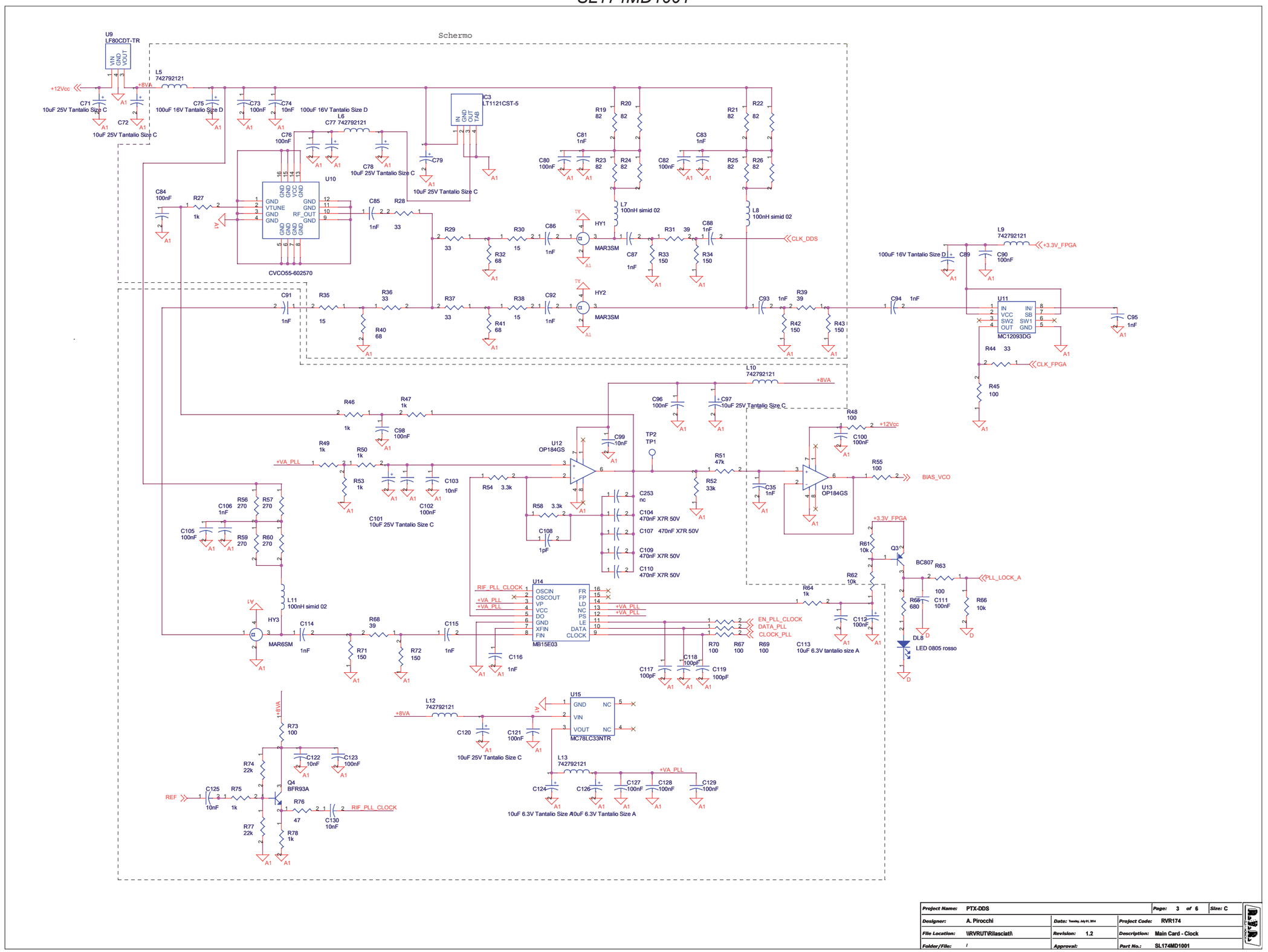
Project Name: PTX-DDS			Page: 1 of 6 Size: C
Designer: A. Pirocchi	Date: Tuesday, July 01, 2014	Project Code: RVR174	
File Location: \\RVRUT\Rilasciati\	Revision: 1.2	Description: Main Card - AD9910	
Folder/File: /	Approval:	Part No.: SL174MD1001	

SL174MD1001

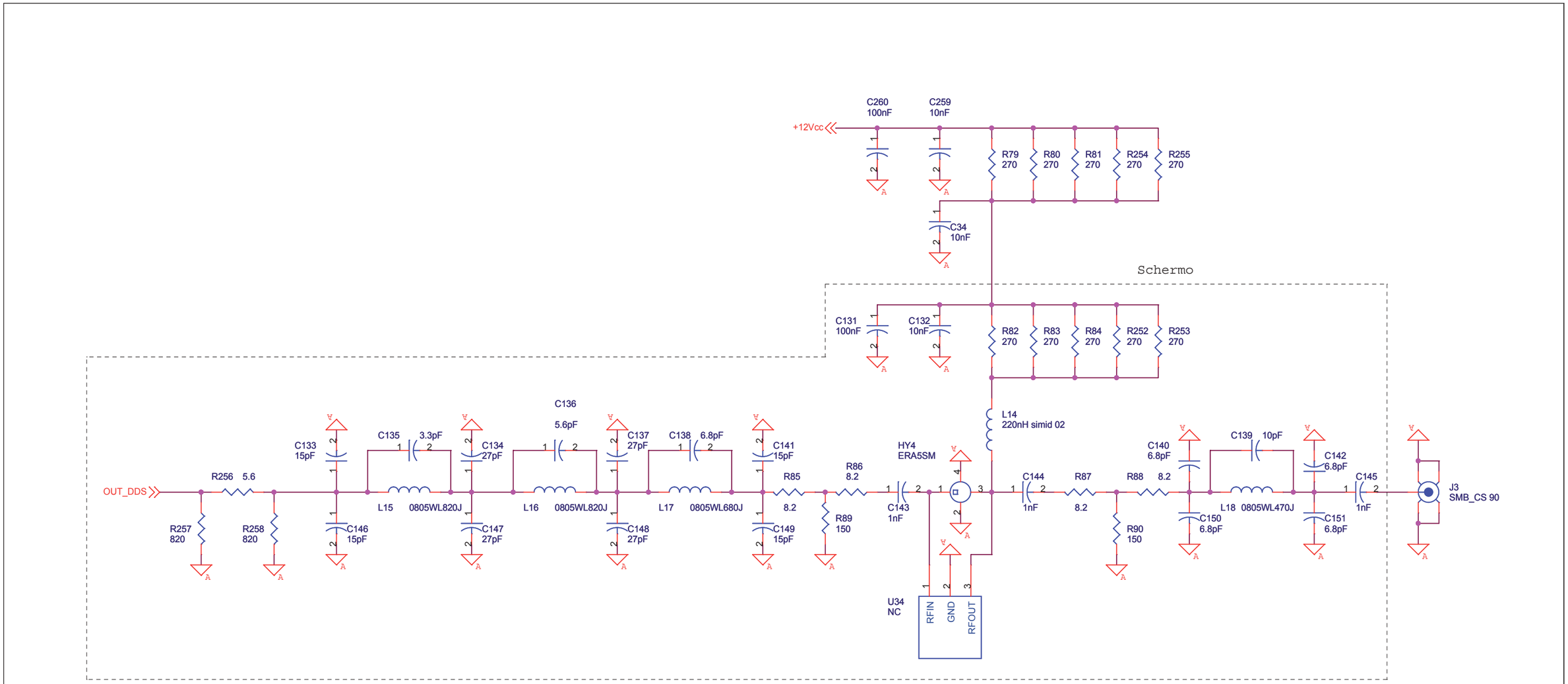


Project Name:	PTX-DDS			Page: 2 of 6	Size: C
Designer:	A. Pirocchi	Date: Tuesday, July 01, 2014		Project Code:	RVR174
File Location:	\\RVRUT\Rilasciati\	Revision:	1.2	Description:	Main Card - Alimentazione
Folder/File:	/	Approval:		Part No.:	SL174MD1001

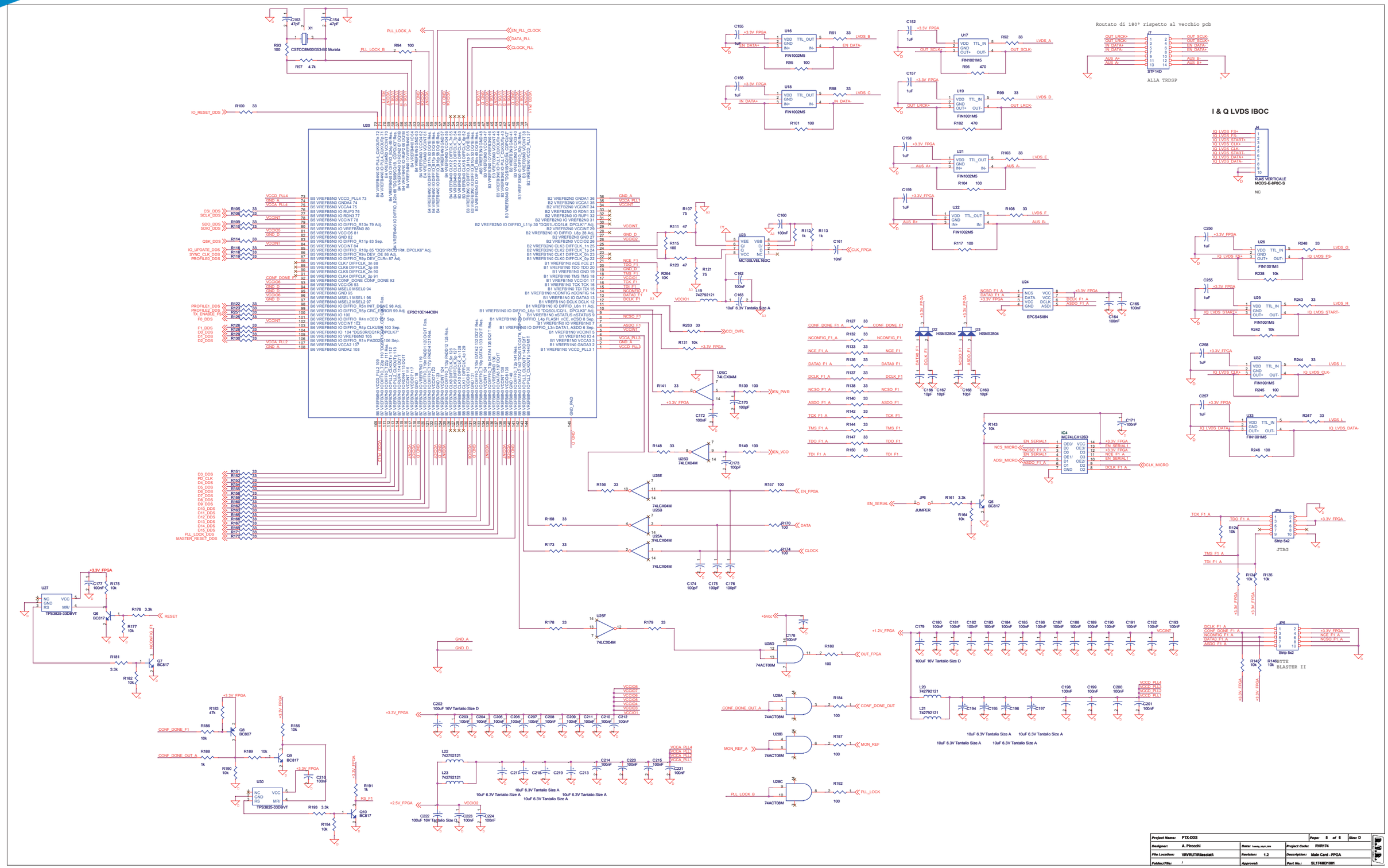
SL174MD1001

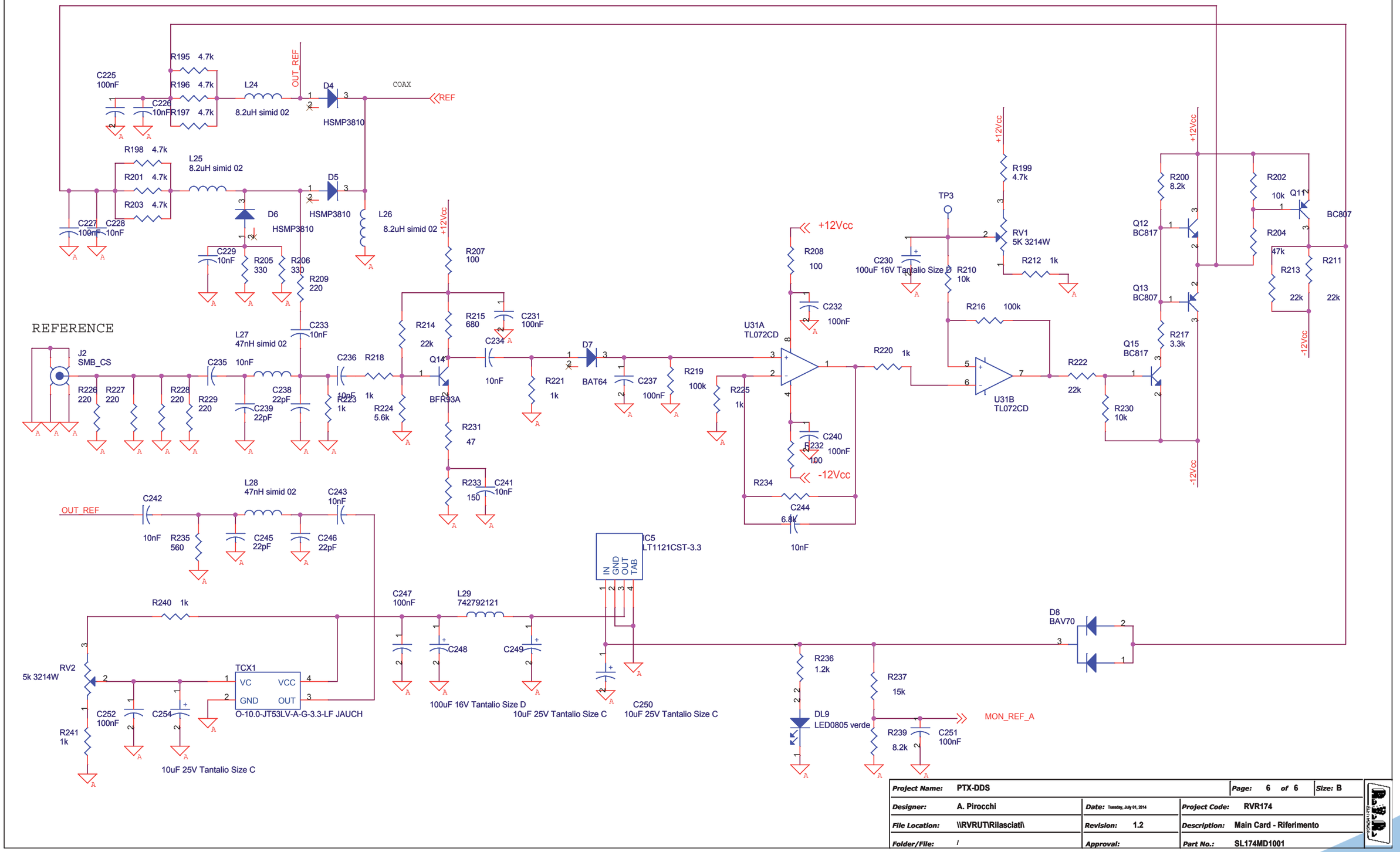


Project Name:	PTX-DDS			Page: 3 of 6	Size: C
Designer:	A. Pirocchi	Date: Tuesday, July 01, 2014		Project Code:	RVR174
File Location:	\\RVRUT\Rilasciati\	Revision:	1.2	Description:	Main Card - Clock
Folder/File:	/	Approval:		Part No.:	SL174MD1001



Project Name:	PTX-DDS			Page: 4 of 6	Size: B
Designer:	A. Pirocchi	Date: Tuesday, July 01, 2014		Project Code:	RVR174
File Location:	\\RVRUT\Rilasciati\	Revision:	1.2	Description:	Main Card - Filtro
Folder/File:	/	Approval:		Part No.:	SL174MD1001


Routato di 180° rispetto al vecchio pcb
I & Q LVDS IBOC
ALLA TRDSP
JTAG
BYTE BLASTER II
Project Name: PTX-DDS
Page: 5 of 6
Size: D
Designer: A. Pirocchi
Project Code: RVR174
File Location: \RVR\UTVR\sesciat6
Description: Main Card - FPGA
Folder/Filter: /
Part No.: SL174MD1001



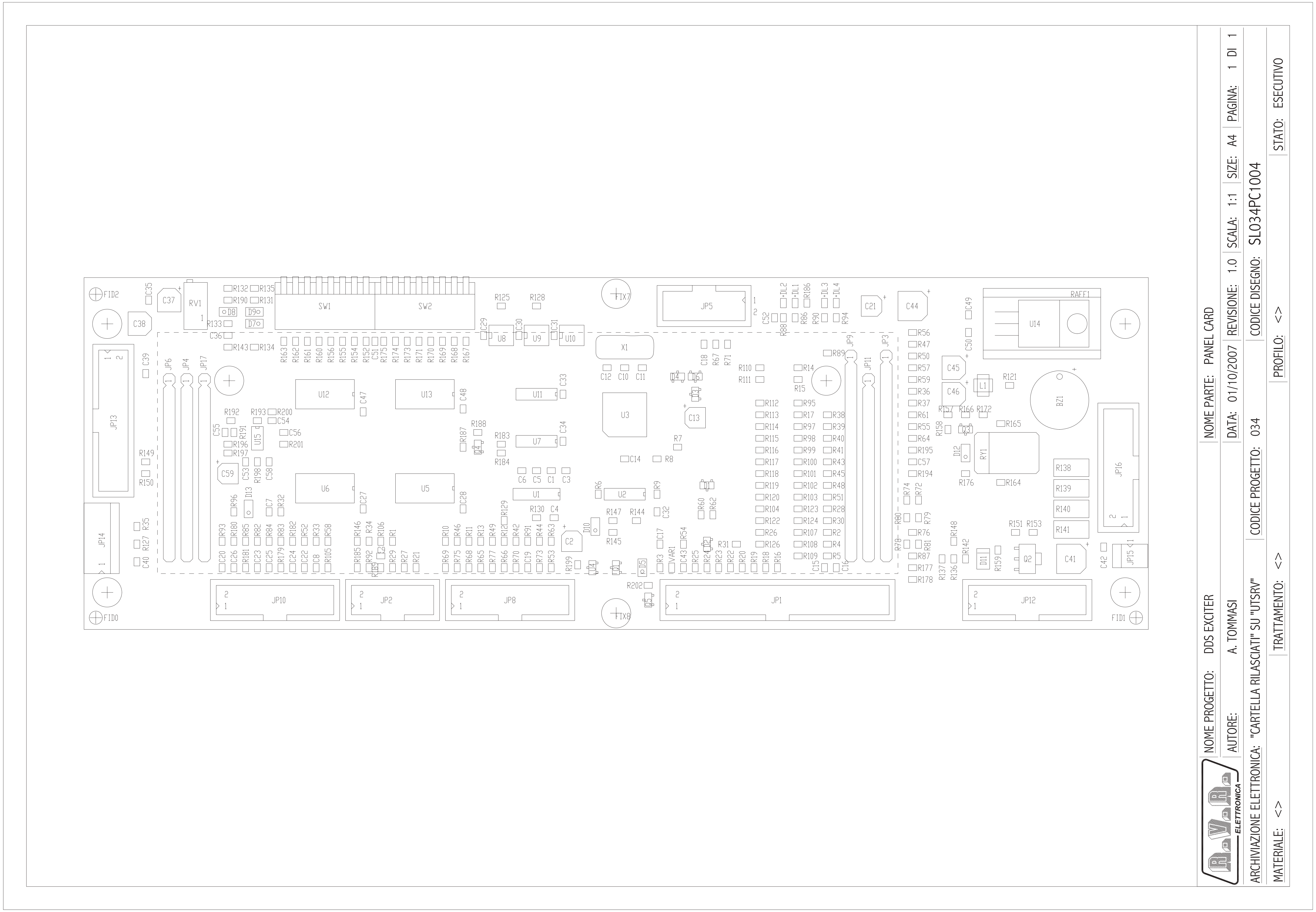
Project Name:	PTX-DDS			Page: 6 of 6	Size: B
Designer:	A. Pirocchi	Date: Tuesday, July 01, 2014		Project Code:	RVR174
File Location:	\\RVRUT\Rilasciati\	Revision:	1.2	Description:	Main Card - Riferimento
Folder/File:	/	Approval:		Part No.:	SL174MD1001

Main Card - SL174MD1001
Rev.1.2 Date: 01/07/2014
PTX-DDS Prg.174
A. Pirocchi

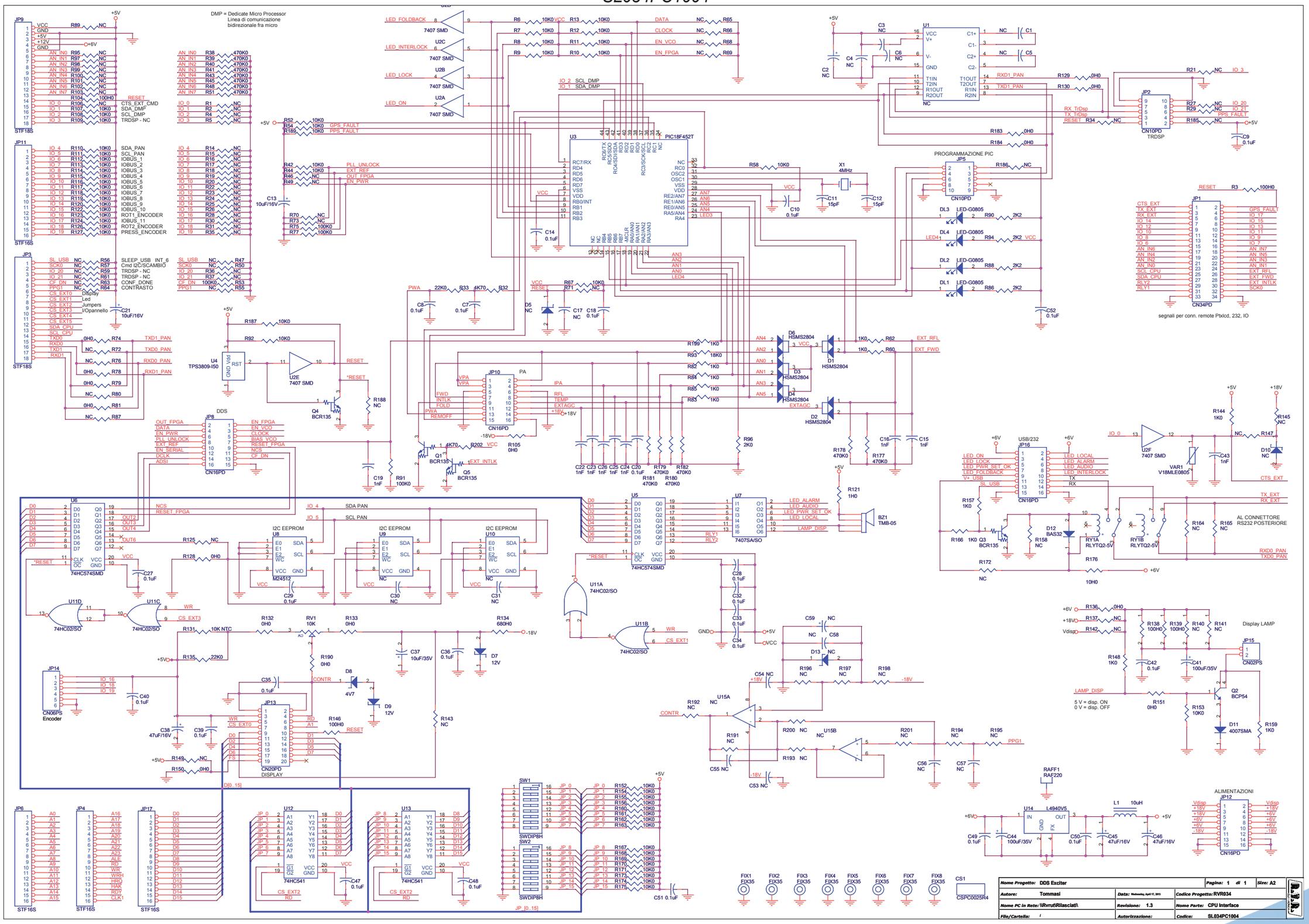
Item	Quantity	Reference	Part
1	23	C1, C2, C34, C74, C99, C103, C122, C125, C130, C132, C161, C226, C228, C229, C233, C234, C235, C236, C241, C242, C243, C244, C259	10nF X7R 50V
2	4	C3, C4, R5, C6	nc
3	1	C5	nc
4	95	C8, C9, C10, C11, C13, C14, C15, C16, C17, C19, C20, C21, C22, C23, C24, C25, C26, C28, C29, C30, C31, C32, C33, C73, C76, C80, C82, C84, C90, C96, C98, C100, C102, C105, C111, C112, C121, C123, C127, C128, C129, C131, C160, C162, C164, C165, C171, C172, C177, C178, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C190, C191, C192, C193, C198, C199, C200, C201, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C214, C215, C216, C220, C221, C223, C224, C225, C227, C231, C232, C237, C240, C247, C251, C252, C260	100nF X7R 50V
5	28	C35, C36, C37, C38, C47, C49, C50, C54, C55, C56, C81, C83, C85, C86, C87, C88, C91, C92, C93, C94, C95, C106, C114, C115, C116, C143, C144, C145	1nF COG 50V
6	17	C39, C40, C59, C60, C63, C65, C69, C71, C72, C78, C79, C97, C101, C120, C249, C250, C254	10uF 25V Tantalio Size C
7	12	C41, C42, C152, C155, C156, C157, C158, C159, C255, C256, C257, C258	1uF X7R 25V
8	18	C43, C44, C45, C46, C48, C51, C52, C53, C57, C58, C117, C118, C119, C170, C173, C174, C175, C176	100pF COG 50V
9	19	C61, C62, C64, C66, C67, C68, C70, C113, C124, C126, C163, C194, C195, C196, C197, C213, C217, C218, C219	10uF 6.3V Tantalio Size A
10	12	C7, C12, C18, C27, C75, C77, C89, C179, C202, C222, C230, C248	100uF 16V Tantalio Size D
11	4	C104, C107, C109, C110	470nF X7R 50V
12	1	C108	1pF COG 50V
13	4	C133, C141, C146, C149	15pF COG 50V
14	4	C134, C137, C147, C148	27pF COG 50V
15	1	C135	3.3pF COG 50V
16	1	C136	5.6pF COG 50V
17	5	C138, C140, C142, C150, C151	6.8pF COG 50V
18	5	C139, C166, C167, C168, C169	10pF COG 50V
19	2	C153, C154	47pF COG 50V
20	4	C238, C239, C245, C246	22pF COG 50V
21	1	C253	nc
22	8	DL1, DL2, DL3, DL4, DL5, DL6, DL7, DL9	LED0805 verde
23	1	DL8	LED 0805 rosso
24	1	D1	BAS16/SOT
25	2	D2, D3	HSMS2804
26	3	D4, D5, D6	HSMP3810
27	1	D7	BAT64
28	1	D8	BAV70
29	2	HY1, HY2	MAR3SM
30	1	HY3	MAR6SM
31	1	HY4	ERA5SM
32	1	IC2	LM78L05ACM
33	1	IC3	LT1121CST-5
34	1	IC4	MC74LCX125D
35	1	IC5	LT1121CST-3.3
36	1	JP1	HEADER 7X2 90 con fermaflat
37	1	JP3	HEADER 8X2 90 con fermaflat
38	2	JP4, JP5	Strip 5x2
39	1	JP6	JUMPER
40	1	J2	SMB_CS 90
41	1	J3	SMB_CS 90
42	1	J4	NC
43	1	J7	HEADER 5X2 con fermaflat
44	16	L1, L2, L3, L4, L5, L6, L9, L10, L12, L13, L19, L20, L21, L22, L23, L29	742792121
46	3	L7, L8, L11	100nH simid 02
47	1	L14	220nH simid 02
48	2	L15, L16	0805WL820J
49	1	L17	0805WL680J
59	1	L18	0805WL470J
51	3	L24, L25, L26	8.2uH simid 02
52	2	L27, L28	47nH simid 02
53	9	Q1, Q2, Q5, Q6, Q7, Q9, Q10, Q12, Q15	BC817
54	4	Q3, Q8, Q11, Q13	BC807
55	2	Q4, Q14	BFR93A
57	2	RV1, RV2	5k 3214W
58	4	R1, R3, R260, R261	49.9
59	2	R2, R259	24.9
60	27	R4, R14, R61, R62, R66, R124, R131, R134, R135, R143, R145, R146, R164, R175, R177, R182, R185, R186, R189, R190, R194, R202, R210, R230, R238, R242, R264	10K
	2	R96, R102	470
61	4	R6, R7, R17, R249	0
62	1	R8	2.7k
63	1	R9	3.9k
64	31	R10, R16, R45, R48, R55, R63, R67, R69, R70, R73, R93, R94, R95, R101, R104, R115, R117, R139, R149, R157, R170, R174, R180, R184, R187, R192, R207, R208, R232, R245, R246	100
65	24	R11, R18, R27, R46, R47, R49, R50, R53, R64, R75, R78, R112, R113, R188, R191, R212, R218, R220, R221, R223, R225, R240, R241, R262	1K
66	4	R12, R13, R205, R206	330
67	6	R15, R209, R226, R227, R228, R229	220
68	8	R19, R20, R21, R22, R23, R24, R25, R26	82
69	17	R28, R29, R36, R37, R44, R91, R92, R98, R99, R103, R108, R150, R179, R243, R244, R247, R248	33
70	3	R30, R35, R38	15
71	3	R31, R39, R68	39
72	3	R32, R40, R41	68
73	9	R33, R34, R42, R43, R71, R72, R89, R90, R233	150
74	3	R51, R183, R204	47k
75	1	R52	33k
76	7	R54, R58, R161, R176, R181, R193, R217	3.3k
77	14	R56, R57, R59, R60, R79, R80, R81, R82, R83, R84, R252, R253, R254, R255	270
78	2	R65, R215	680
79	6	R74, R77, R211, R213, R214, R222	22k
80	4	R76, R111, R120, R231	47
81	4	R85, R86, R87, R88	8.2
82	8	R97, R195, R196, R197, R198, R199, R201, R203	4.7k
83	50	R100, R105, R106, R109, R110, R114, R116, R118, R119, R122, R123, R125, R126, R127, R128, R129, R130, R132, R133, R136, R137, R138, R140, R141, R142, R144, R147, R148, R151, R152, R153, R154, R155, R156, R158, R159, R160, R162, R163, R165, R166, R167, R168, R169, R171, R172, R173, R178, R251, R263	33
84	2	R107, R121	75
85	3	R216, R219, R250	100k
86	1	R224	5.6k
87	1	R234	6.8k
88	1	R235	560
89	1	R236	1.2k
90	1	R237	15k
91	2	R239, R200	8.2k

Item	Quantity	Reference	Part
92	1	R256	5.6
93	2	R257, R258	820
94	1	TCX1	O-10.0-JT53LV-A-G-3.3-LF JAUCH
95	2	TP1, TP3	TP
96	1	TP2	TP1
97	1	TR1	TC1-113MG2
98	1	TR2	ADTT1-1WT
99	1	U1	AD9910BSVZ
100	1	U2	L7812ACV
101	1	U3	L79L12ACD13TR
102	1	U4	LT1963AESR-1.8
103	2	U5, U8	LD29300V33
104	1	U6	LT1963AET
105	1	U7	FAN1950D25X
106	1	U9	LF80CDT-TR
107	1	U10	CVCO55-602570
108	1	U11	MC12093DG
109	2	U12, U13	OP184GS
110	1	U14	MB15E03
111	1	U15	MC78LC33NTR
112	4	U16, U18, U21, U22	FIN1002M5
113	6	U17, U19, U26, U29, U32, U33	FIN1001M5
114	1	U20	EP3C10E144C8N
115	1	U23	MC100LVEL16DC
116	1	U24	EPCS4SI8N
117	1	U25	74LCX04M
118	2	U27, U30	TPS3825-33DBVT
119	1	U28	74ACT08M
120	1	U31	TL072CD
121	1	U34	NC
122	1	X1	CSTCC8M00G53-B0 Murata
128	1	CS	CSMD0178R1
129	2	Schermo coperchio	BOXVCO110 COBVCO110
130	1	Schermo coperchio	SCHMD174

SL034PC1004



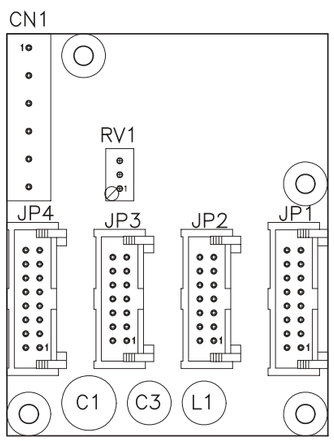
SL034PC1004



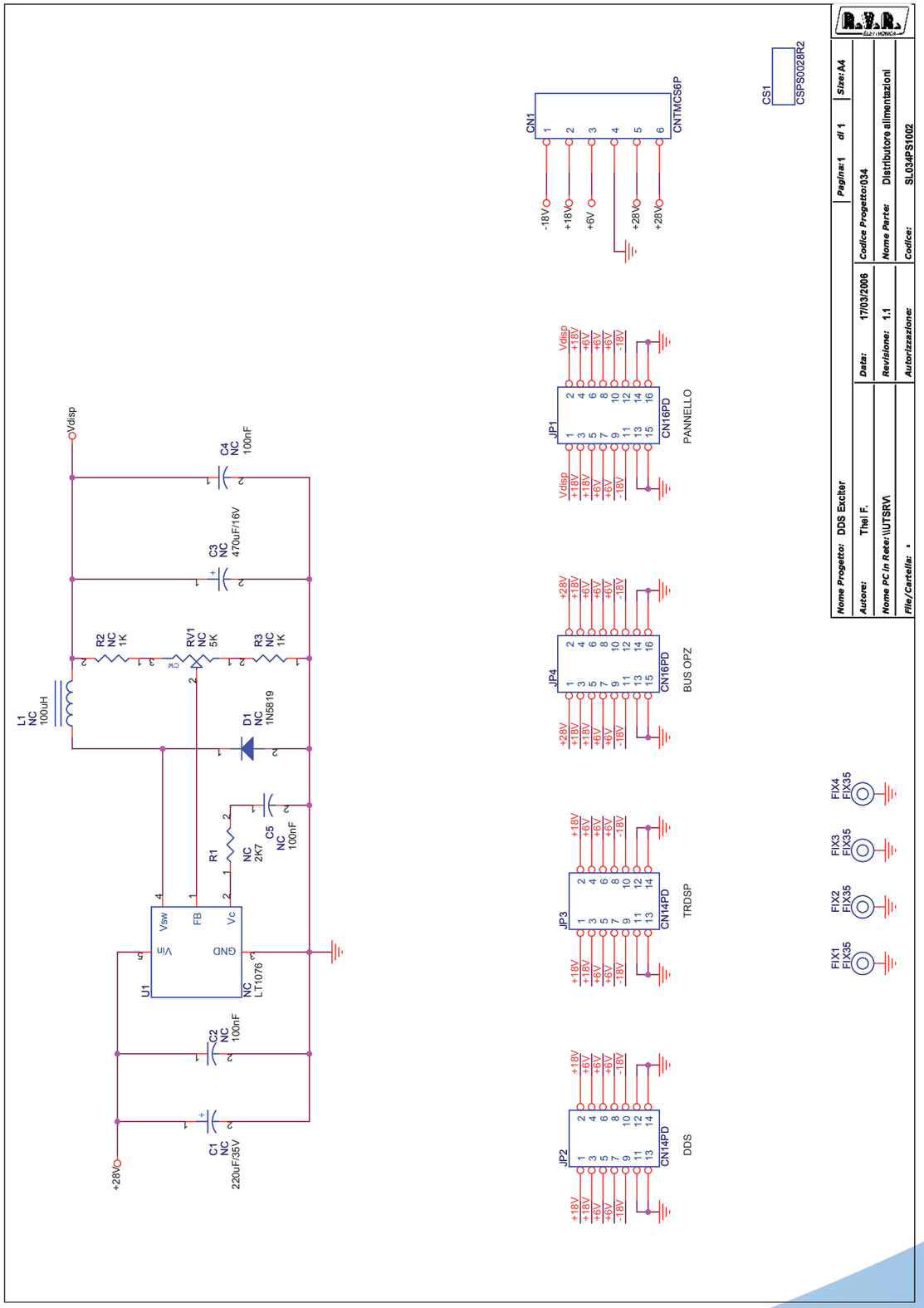
CPU Interface Revised: 17/04/2013
SL034PC1004 Revision: 1.3
DDS Exciter
RVR034
A. Tommasi

Item	Quantity	Reference	Part	Description
1	1	BZ1	TMB-05	Buzzer TMB-05
2	1	CS1	CSPC0025R4	Circuito stampato
3	24	C7,C8,C9,C10,C14,C18, C20,C27,C28,C29,C32,C33, C34,C35,C36,C39,C40,C42, C47,C48,C49,C50,C51,C52	0.1uF	Cond. SMD 0805
4	2	C13,C21	10uF/16V	Cond. Elett. SMD d. 4mm
5	2	C11,C12	15pF	Cond. SMD 0805
6	9	C15,C16,C19,C22,C23,C24, C25,C26,C43	1nF	Cond. SMD 0805
7	14	C17,C30,C31,C53,C54,C55, C56,C57,C58,C1,C3,C4,C5,C6	NC	Cond. SMD 0805
8	1	C37	10uF/35V	Cond. Elett. SMD d. 5mm
9	3	C38,C45,C46	47uF/16V	Cond. Elett. SMD d. 5mm
10	2	C41,C44	100uF/35V	Cond. Elett. SMD d. 6.3mm
11	2	C2,C59	NC	Cond. Elett. SMD d. 4mm
12	4	DL1,DL2,DL3,DL4	LED-G0805	LED SMD 0805
13	5	D1,D2,D3,D4,D6	HSMS2804	Doppio Diodo SMD SOT23
14	3	D5,D10,D13	NC	MINIMELF SMD Zener Diode
15	2	D7,D9	12V	MINIMELF SMD Zener Diode
16	1	D8	4V7	MINIMELF SMD Zener Diode
17	1	D11	4007SMA	Diodo SMD cont. SMA
18	1	D12	BAS32	MINIMELF SMD Diode
19	8	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6,FIX7,FIX8	FIX35	Foro fissaggio 3.5mm
20	1	JP1	CN34PD	Connettore 34 poli Flat cs
21	2	JP2,JP5	CN10PD	Connettore 10 poli Flat cs
22	2	JP3,JP9	STF18S	Strip femmina 18 pin
23	4	JP4,JP6,JP11,JP17	STF16S	Strip femmina 16 pin
24	4	JP8,JP10,JP12,JP16	CN16PD	Connettore 16 poli Flat cs
25	1	JP13	CN20PD	Connettore 20 poli Flat cs
26	1	JP14	CN06PS	Connettore 6 poli Panduit
27	1	JP15	CN02PS	Connettore 2 poli Panduit
28	1	L1	10uH	Ind. verticale SMD dia. 4 p 4.8
29	4	Q1,Q3,Q4,Q5	BCR135	Trans./Res. NPN SOT23
30	1	Q2	BCP54	Trans. PNP SOT223
31	1	RAFF1	RAF220	Dissipatore TO220
32	1	RV1	10K	Trimmer Rg H 3296X
33	1	RY1	RLYTQ2-5V	Rele' TQ2
34	82	R1,R2,R4,R5,R14,R15,R16, R17,R18,R19,R20,R21,R22, R23,R24,R25,R26,R27,R28, R29,R30,R31,R34,R35,R36, R37,R46,R47,R49,R50,R55, R56,R57,R59,R61,R63,R64, R65,R66,R68,R69,R70,R71, R72,R73,R76,R80,R87,R89, R95,R97,R98,R99,R100, R101,R102,R103,R106,R125, R137,R142,R143,R145,R147, R149,R158,R164,R165,R172, R185,R186,R188,R191,R192, R193,R194,R195,R196,R197, R198,R200,R201	NC	Res. SMD 0805 1%
35	3	R3,R104,R146	100H0	Res. SMD 0805 1%
36	53	R6,R7,R8,R9,R10,R11,R12, R13,R42,R44,R52,R54,R58, R67,R92,R107,R108,R109, R110,R111,R112,R113,R114, R115,R116,R117,R118,R119, R120,R122,R123,R124,R126, R127,R152,R153,R154,R155, R156,R160,R161,R162,R163, R167,R168,R169,R170,R171, R173,R174,R175,R187,R189	10K0	Res. SMD 0805 1%
37	2	R32,R202	4K70	Res. SMD 0805 1%
38	2	R33,R135	22K0	Res. SMD 0805 1%
39	14	R38,R39,R40,R41,R43,R45, R48,R51,R177,R178,R179, R180,R181,R182	470K0	Res. SMD 0805 1%
40	4	R53,R75,R77,R91	100K0	Res. SMD 0805 1%
41	12	R60,R62,R82,R83,R84,R85, R144,R148,R157,R159,R166, R199	1K0	Res. SMD 0805 1%
42	16	R74,R78,R79,R81,R105, R128,R129,R130,R132,R133, R136,R150,R151,R183,R184, R190	0H0	Res. SMD 0805 1%
43	4	R86,R88,R90,R94	2K2	Res. SMD 0805 1%
44	1	R93	18K0	Res. SMD 0805 1%
45	1	R96	2K0	Res. SMD 0805 1%
46	1	R121	1H0	Res. SMD 0805 1%
47	1	R131	10K NTC	Res. SMD 0805 1%
48	1	R134	680H0	Res. SMD 0805 1%
49	2	R138,R139	100H0	Res. SMD 2512 1%
50	2	R140,R141	NC	Res. SMD 2512 1%
51	1	R176	10H0	Res. SMD 0805 1%
52	2	SW1,SW2	SWDIP8H	Dip switch 8 vie orizz.
53	1	U1	NC	RS232 Driver SMD SO16
54	1	U2	7407 SMD	Hex buffer OC SMD SO14
55	1	U3	PIC18F452T	TQFP44 SMD Microprocessor
56	1	U4	TPS3809-I50	uP supply supervisor
57	2	U5,U6	74HC574SMD	Octal Latch SMD
58	1	U7	7407SA/SO	Hex buffer OC SMD SO14
59	1	U8	M24512	IIC Bus 512Kb EEPROM
60	2	U9,U10	NC	IIC Bus 512Kb EEPROM
61	1	U11	74HC02/SO	Quad NOR SMD SO14
62	2	U12,U13	74HC541	Octal buffer SMD
63	1	U14	L4940V5	Stabilizzatore TO220
64	1	U15	NC	Dual Op. SMD SO8
65	1	VAR1	V18MLE0805	ESD SMD protector
66	1	X1	4MHz	Quarzo SMD HC49SMD

SL034PS1002



NOME PROGETTO: DDS EXCITER			NOME PARTE: SCHEDA DISTRIBUTORE ALIMENTAZIONI				
AUTORE: \\UTSRV		DATA: 20/06/2005	REVISIONE: 1.0	SCALA: 1:1	SIZE: A4	PAGINA: 1 DI 1	
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UTSRV"		CODICE PROGETTO: 034		CODICE DISEGNO: SL034PS1002			
MATERIALE: <>	TRATTAMENTO: <>		PROFILO: <>		STATO: PROGETTUALE		

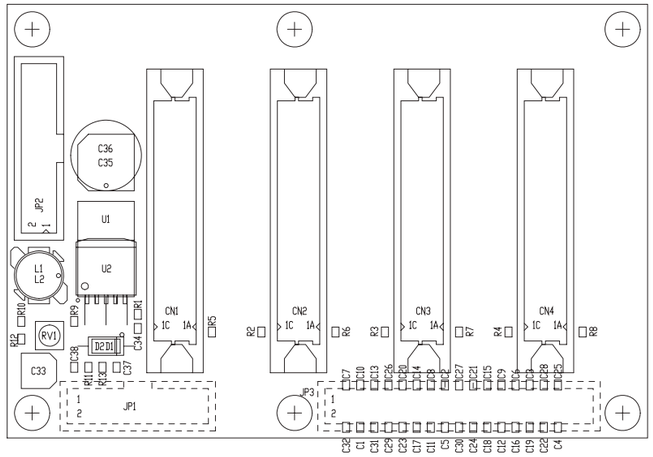


SL034PS1002

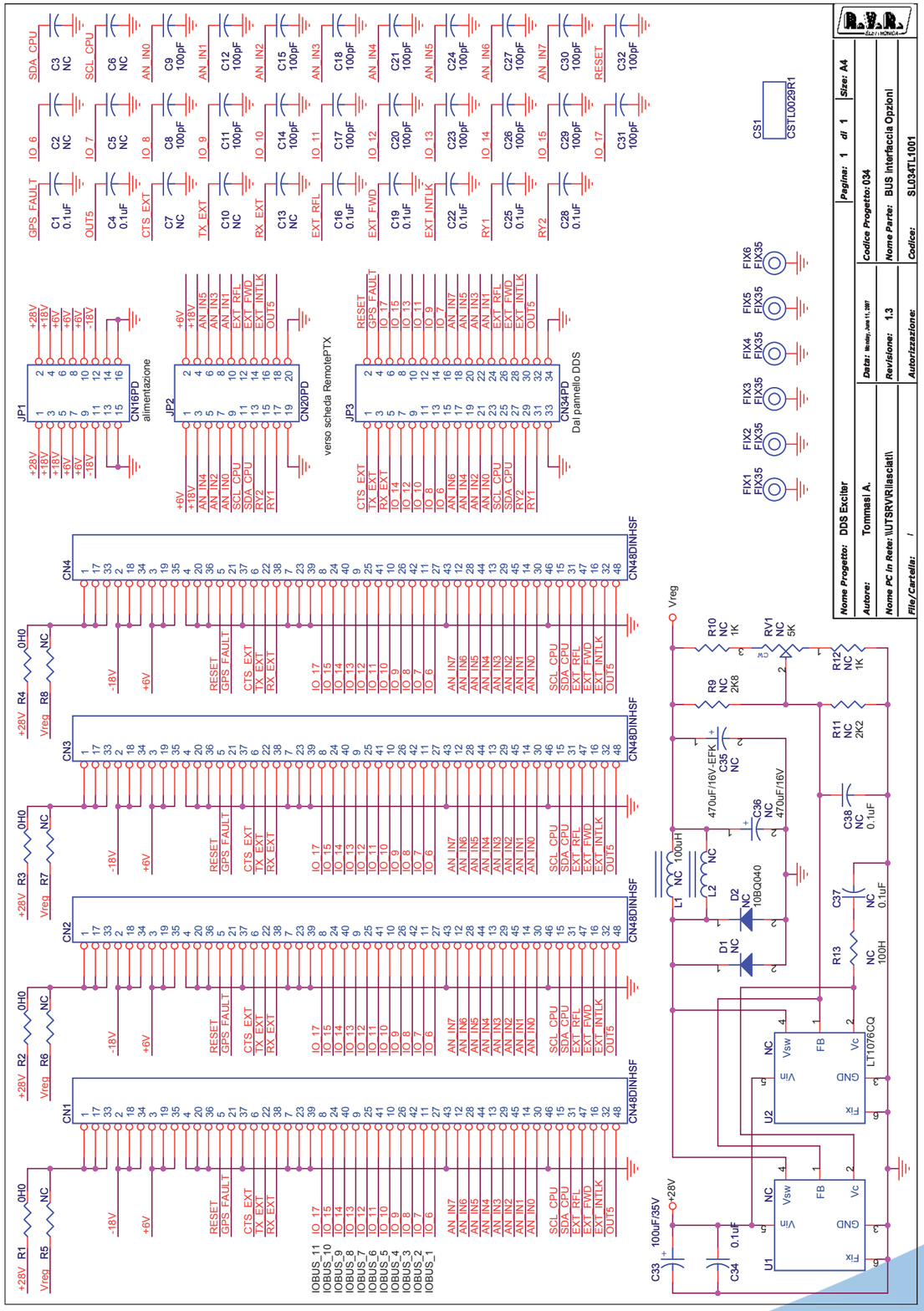
Revisione:1.1 Data: 17/03/2006
Scheda distribuzione alimentazioni

Item	Quantity	Reference	Part	Description
1	1	CN1	CNTMCS6P	Conn. Phoenix 6 poli
2	1	CS1	CSPS0028R2	Circuito stampato
3	1	C1	NC	Cond. Elettr. Dia 10 P5.08
4	3	C2, C4, C5	NC	Cond. Poliestere p 5mm
5	1	C3	NC	Cond. Elettr. Dia 8 P3
6	1	D1	NC	Diodo plastico DO41
7	4	FIX1, FIX2, FIX3, FIX4	FIX35	Foro fissaggio 3.5mm
8	2	JP4, JP1	CN16PD	Connettore 16 poli Flat cs
9	2	JP2, JP3	CN14PD	Connettore 14 poli Flat cs
10	1	L1	NC	Ind. verticale dia. 8 p 5
11	1	RV1	NC	Trimmer Rg V 3296W
12	1	R1	NC	Res. 1/4W 5%
13	2	R2, R3	NC	Res. 1/4W 5%
14	1	U1	NC	Regolatore switching

SL034TL1001



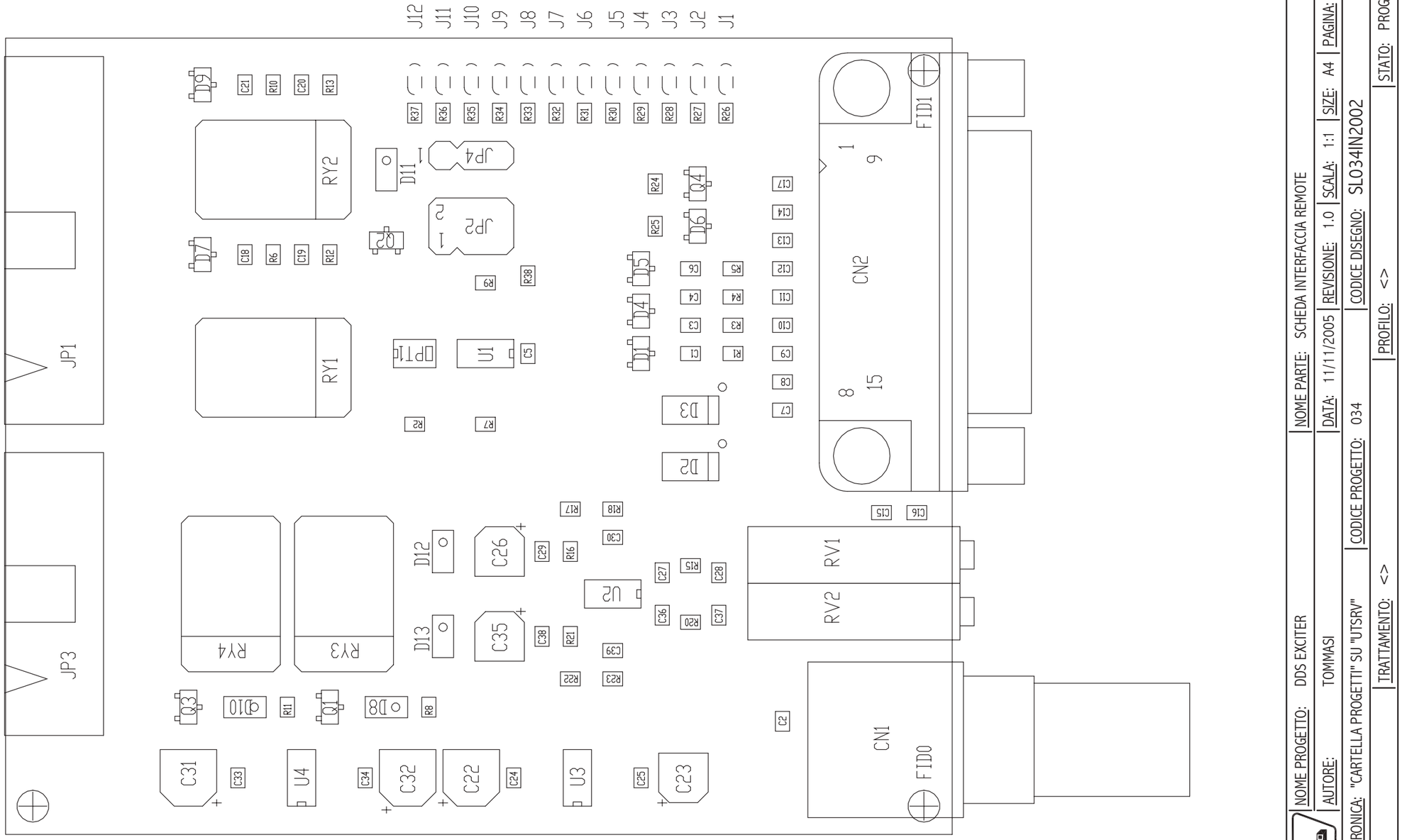
NOME PROGETTO: DDS EXCITER			NOME PARTE: SCHEDA PANNELLO DISTRIBUZIONE TLM				
AUTORE: F. THEI		DATA: 20/06/2005	REVISIONE: 1.0	SCALA: 1:1	SIZE: A4	PAGINA: 1 DI 1	
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UTSRV"		CODICE PROGETTO: 034		CODICE DISEGNO: SL034TL1001			
MATERIALE: <>	TRATTAMENTO: <>		PROFILO: <>		STATO: PROGETTUALE		



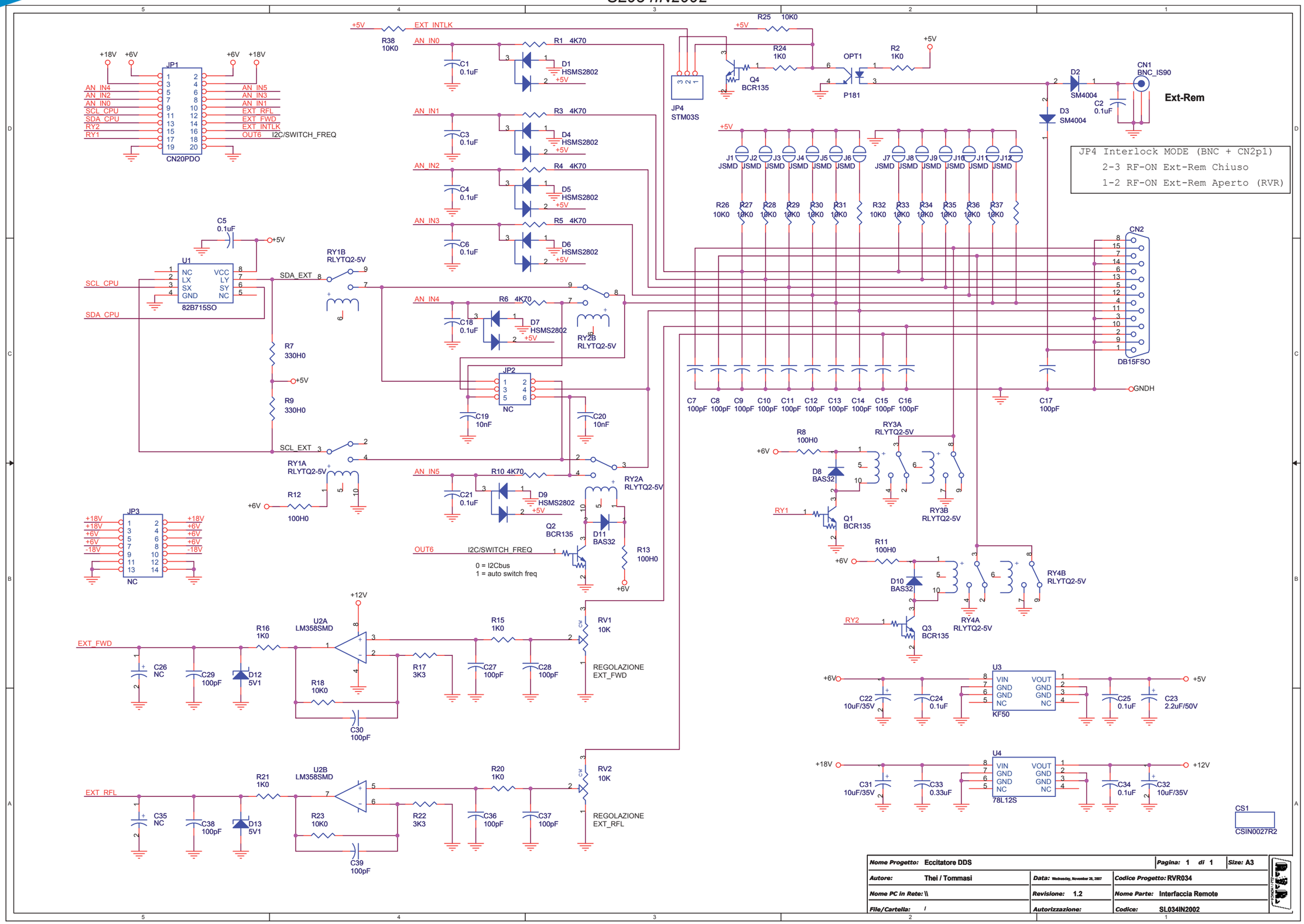
SL034TL1001

BUS interfaccia Opzioni Revised: 11/06/2007
SL034TL1001 Revision: 1.3
DDS Exciter
034
Tommasi A.

Item	Quantity	Reference	Part	Description
1	4	CN1, CN2, CN3, CN4	CN48DINHSF	Connettore F 48 poli DIN cs
2	1	CS1	CSTL0029R1	Circuito stampato
3	8	C1, C4, C16, C19, C22, C25, C28, C34	0.1uF	Cond. SMD 0805
4	18	C8, C9, C11, C12, C14, C15, C17, C18, C20, C21, C23, C24, C26, C27, C29, C30, C31, C32	100pF	Cond. SMD 0805
5	9	C2, C5, C3, C6, C7, C10, C13, C37, C38	NC	Cond. SMD 0805
6	1	C33	100uF/35V	Cond. Elett. SMD d. 6.3mm
7	1	C35	NC	Cond. Elett. SMD d. 10mm
8	1	C36	NC	Cond. Elettr. Dia 13 P5.08
9	1	D1	NC	Diodo plastico DO41
10	1	D2	NC	MELF SMD Diode
11	6	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6	FIX35	Foro fissaggio 3.5mm
12	1	JP1	CN16PD	Connettore 16 poli Flat cs
13	1	JP2	CN20PD	Connettore 20 poli Flat cs
14	1	JP3	CN34PD	Connettore 34 poli Flat cs
15	1	L1	NC	Induttanza EPCOS B82464-A4 10mmx10mm
16	1	L2	NC	Ind. verticale dia. 8 p 5
17	1	RV1	NC	Trimmer SMD
18	4	R1, R2, R3, R4	0H0	Res. SMD 0805
19	9	R5, R6, R7, R8, R9, R10, R11, R12, R13	NC	Res. SMD 0805
20	1	U1	NC	Regolatore switching
21	1	U2	NC	Regolatore switching SMD

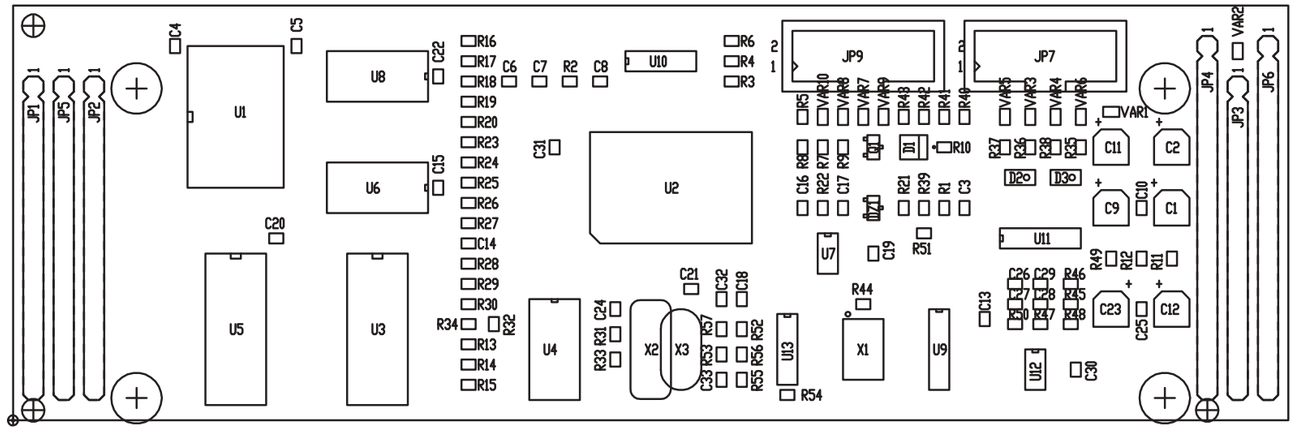

J12 J11 J10 J9 J8 J7 J6 J5 J4 J3 J2 J1
JP1
JP3
RY1
RY2
RY3
RY4
CN1
CN2
FID1
FID0
RV1
RV2
U1
U3
U4
JP2
JP4
JP5
Q1
Q3
Q4
D1
D2
D3
D4
D5
D6
D7
D9
D10
D11
D12
D13
C23
C26
C31
C32
C35
C22
NOME PARTE: SCHEDA INTERFACCIA REMOTE
DATA: 11/11/2005
REVISIONE: 1.0
SCALA: 1:1
SIZE: A4
PAGINA: 1 DI 1
CODICE PROGETTO: 034
CODICE DISEGNO: SL034IN2002
PROFILO: <>
STATO: PROGETTUALE
NOME PROGETTO: DDS EXCITER
AUTORE: TOMMASI
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UTSRV"
MATERIALE: <>
TRATTAMENTO: <>

SL034IN2002



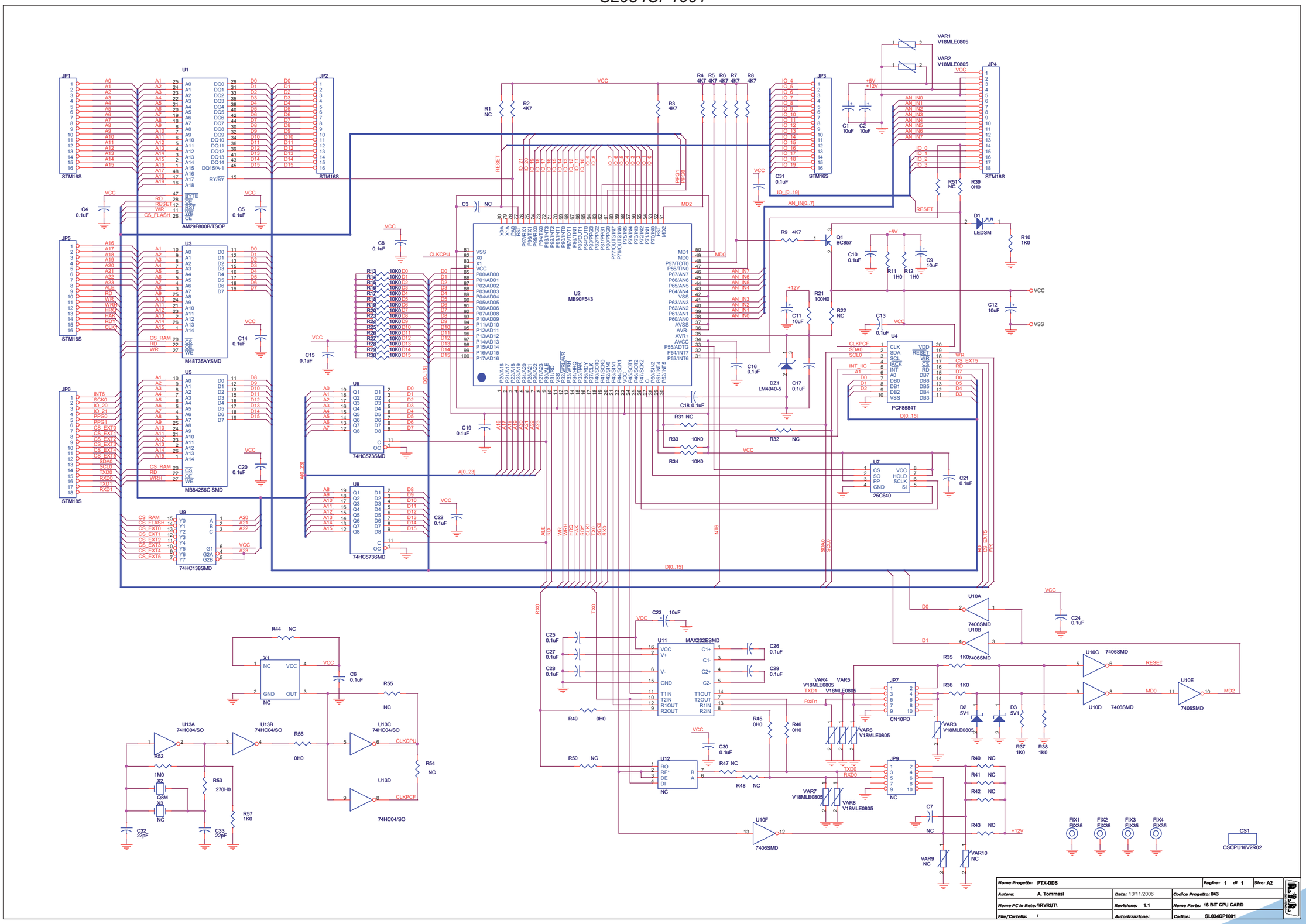
Interfaccia Remote Revised: Monday, September 18, 2006
SL034IN2002 Revision: 1.2
Eccitatore DDS
RVR034
Thei / Tommasi

Item	Quantity	Reference	Part	Description
1	1	CN1	BNC_IS90	Connettore BNC metallico 90°
2	1	CN2	DB15FSO	Connettore DB15 femm. cs 90°
3	1	CS1	CSIN0027R2	Circuito stampato
4	11	C1,C2,C3,C4,C5,C6,C18, C21,C24,C25,C34	0.1uF	Cond. SMD 0805
5	19	C7,C8,C9,C10,C11,C12,C13, C14,C15,C16,C17,C27,C28, C29,C30,C36,C37,C38,C39	100pF	Cond. SMD 0805
6	2	C19,C20	10nF	Cond. SMD 0805
7	3	C22,C31,C32	10uF/35V	Cond. Elett. SMD d. 5mm
8	1	C23	2.2uF/50V	Cond. Elett. SMD d. 4mm
9	2	C26,C35	NC	Cond. Elett. SMD d. 4mm
10	1	C33	0.33uF	Cond. SMD 0805
11	6	D1,D4,D5,D6,D7,D9	HSMS2802	Doppio Diodo SMD SOT23
12	2	D2,D3	SM4004	MELF SMD Diode
13	3	D8,D10,D11	BAS32	MINIMELF SMD Diode
14	2	D12,D13	5V1	MINIMELF SMD Zener Diode
15	1	JP1	CN20PDO	Connettore 20 poli 90° Flat cs
16	1	JP2	NC	Strip maschio 3+3 pin
17	1	JP3	NC	Connettore 14 poli Flat cs a 90°
18	1	JP4	STM03S	Strip maschio 3 pin
19	12	J1,J2,J3,J4,J5,J6,J7,J8, J9,J10,J11,J12	JSMD	Pad SMD a saldare
20	1	OPT1	P181	Optoisolatore SMD SO6
21	4	Q1,Q2,Q3,Q4	BCR135	Trans./Res. NPN SOT23
22	2	RV1,RV2	10K	Trimmer Rg H 3006
23	4	RY1,RY2,RY3,RY4	RLYTQ2-5V	Rele' TQ2
24	6	R1,R3,R4,R5,R6,R10	4K70	Res. SMD 0805
25	6	R2,R15,R16,R20,R21,R24	1K0	Res. SMD 0805
26	2	R7,R9	330H0	Res. SMD 0805
27	4	R8,R11,R12,R13	100H0	Res. SMD 0805
28	2	R17,R22	3K3	Res. SMD 0805
29	16	R18,R23,R25,R26,R27,R28, R29,R30,R31,R32,R33,R34, R35,R36,R37,R38	10K0	Res. SMD 0805
30	1	U1	82B715SO	IIC Bus driver SMD SO8
31	1	U2	LM358SMD	Dual Op. SMD SO8
32	1	U3	KF50	Stabilizzatroe SMD SO8
33	1	U4	78L12S	Stabilizzatroe SMD SO8



NOME PARTE:	16 BIT CPU CARD
DATA: 12/02/2004	REVISIONE: 2.1
SCALA: 1:1	SIZE: A4
PAGINA: 1 DI 1	
CODICE PROGETTO: RV021	CODICE DISEGNO: SL034CP1001
PROFILO:	STATO: ESECUTIVO
NOME PROGETTO: PTX-LCD	
AUTORE: A. TOMMASI	
ARCHIVIAZIONE ELETTRONICA: \\RVRUT\	CODICE PROGETTO:
MATERIALE: FR4-74 1.6mm Cu 35um 4 LAYER	TRATTAMENTO:

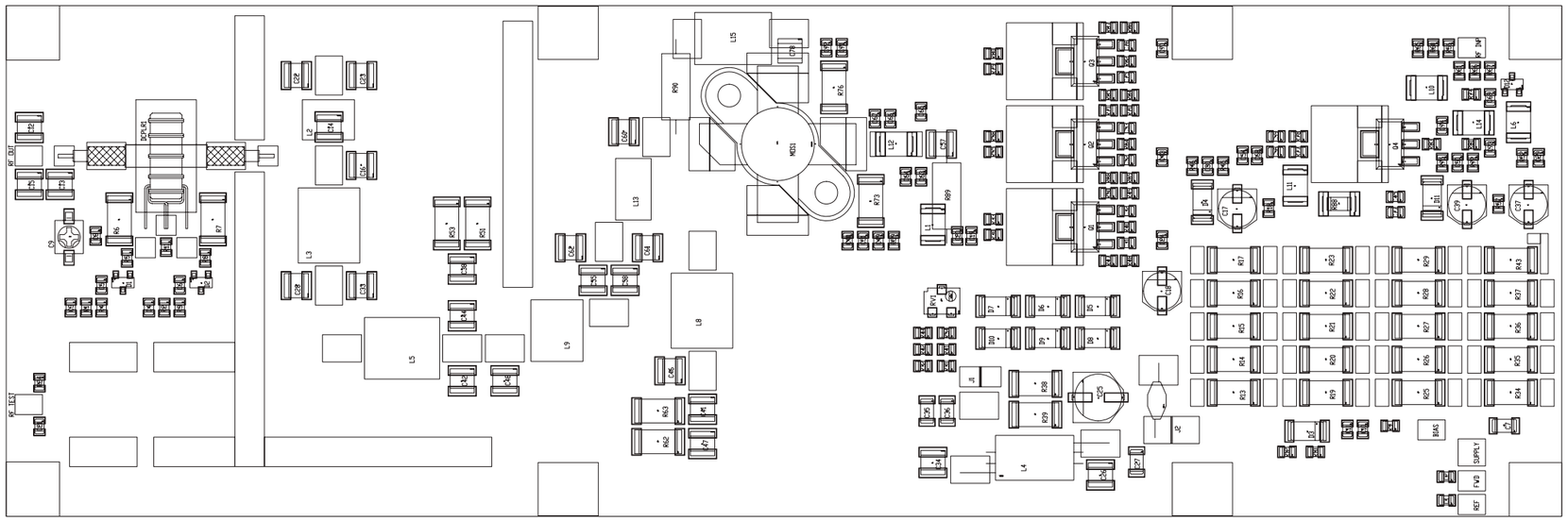
SL034CP1001



Nome Progetto: PTX-DDS			Pagina: 1 di 1 Size: A2
Autore: A. Tommasi	Data: 13/11/2006	Codice Progetto: 043	
Nome PC in Rete: \\RVRUT\	Revisione: 1.1	Nome Parte: 16 BIT CPU CARD	
File/Cartella: /	Autorizzazione:	Codice: SL034CP1001	

16 BIT CPU CARD - SL034CP1001
Revision: 1.1 Date: 13/11/2006
PTX-DDS
034
A. Tommasi

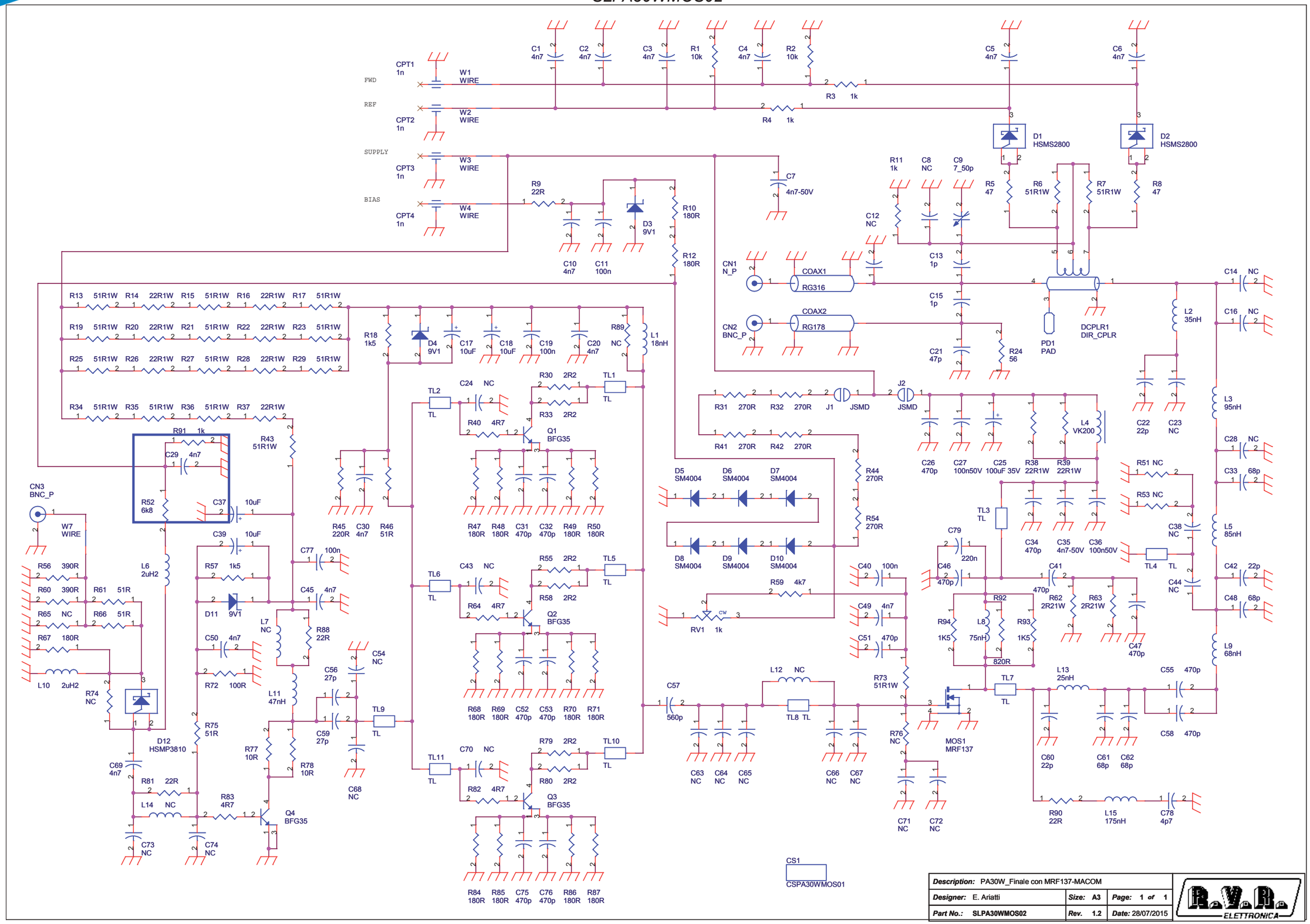
Item	Quantity	Reference	Part	Description
1	1	CS1	CSCPU16V2R02	Circuito stampato
2	6	C1, C2, C9, C11, C12, C23	10uF	Cond. Elett. SMD d. 4mm
3	2	C3, C7	NC	Cond. SMD 0805
4	23	C4, C5, C6, C8, C10, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C24, C25, C26, C27, C28, C29, C30, C31	0.1uF	Cond. SMD 0805
5	2	C32, C33	22pF	Cond. SMD 0805
6	1	DZ1	LM4040-5	Diodi Zener SMD SOT23
7	1	D1	LEDSM	LED SMD PLCC2
8	2	D2, D3	5V1	MINIMELF SMD Zener Diode
9	4	FIX1, FIX2, FIX3, FIX4	FIX35	Foro fissaggio
10	4	JP1, JP2, JP3, JP5	STM16S	Strip maschio 16 pin
11	2	JP4, JP6	STM18S	Strip maschio 18 pin
12	1	JP7	CN10PD	Connettore 10 poli Flat cs
13	1	JP9	NC	Connettore 10 poli Flat cs
14	1	Q1	BC857	Trans. PNP SOT23
15	15	R1, R22, R31, R32, R40, R41, R42, R43, R44, R47, R48, R50, R51, R54, R55	NC	Res. SMD 0805
16	8	R2, R3, R4, R5, R6, R7, R8, R9	4K7	Res. SMD 0805
17	6	R10, R35, R36, R37, R38, R57	1K0	Res. SMD 0805
18	2	R11, R12	1H0	Res. SMD 0805
19	18	R13, R14, R15, R16, R17, R18, R19, R20, R23, R24, R25, R26, R27, R28, R29, R30, R33, R34	10K0	Res. SMD 0805
20	1	R21	100H0	Res. SMD 0805
21	5	R39, R45, R46, R49, R56	0H0	Res. SMD 0805
22	1	R52	1M0	Res. SMD 0805
23	1	R53	270H0	Res. SMD 0805
24	1	U1	AM29F800B/TSOP	Flash Eprom SMD TSOP48
25	1	U2	MB90F543	QFP100 SMD Microprocessor
26	1	U3	M48T35AYSMD	RAM+RTC with Battery SMD
27	1	U4	PCF8584T	IIC Bus controller SMD
28	1	U5	MB84256C SMD	RAM+RTC with Battery SMD
29	2	U6, U8	74HC573SMD	Octal Latch SMD
30	1	U7	25C640	Serial EEPROM SMD
31	1	U9	74HC138SMD	8 line decoder SMD
32	1	U10	7406SMD	Hex inv OC SMD SO14
33	1	U11	MAX202ESMD	RS232 Driver SMD SO16
34	1	U12	NC	RS485 driver SMD SO8
35	1	U13	74HC04/SO	Hex Inv. SMD SO14
36	8	VAR1, VAR2, VAR3, VAR4, VAR5, VAR6, VAR7, VAR8	V18MLE0805	ESD SMD protector
37	2	VAR9, VAR10	NC	ESD SMD protector
38	1	X1	NC	Osc. quarzo SMD
39	1	X2	Q8M	Quarzo SMD HC49SMD
40	1	X3	NC	Quarzo HC18



NOME PARTE: PA 30W MOSFET
DATA: 04/11/2005 | REVISIONE: 1.0 | SCALA: 1:1 | SIZE: A4 | PAGINA: 1 DI 1
CODICE PROGETTO: 037 | CODICE DISEGNO: SLPA30WMOS02
PROFILO: <> | STATO: ESECUTIVO

NOME PROGETTO: PA 30W MOS
AUTORE: MAURO UCELLI
ARCHIVIAZIONE ELETTRONICA: "CARTELLA PROGETTI" SU "UT_SRV"
MATERIALE: <> | TRATTAMENTO: <>

SLPA30WMOS02

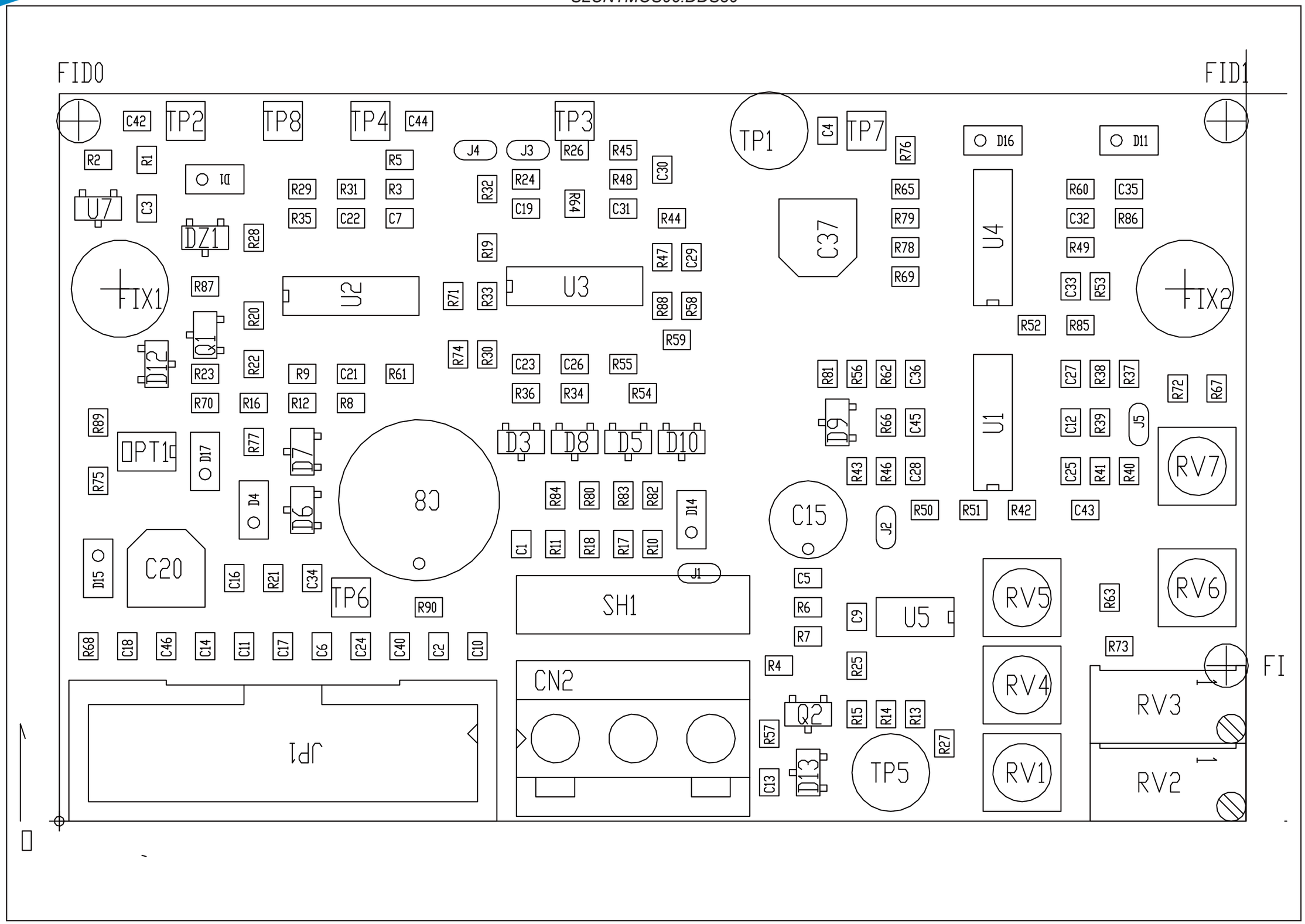


SLPA30WMOS02

PA30W_Finale con MRF137-MACOM
SLPA30WMOS02
Revision: 1.2
Data: 28/07/2015
E. Ariatti

Item	Quantity	Reference	Part	Description
1	1	CN1	N_P	Conn. N da pannello
2	2	CN2,CN3	BNC_P	Conn. BNC da pannello
3	1	COAX1	RG316	Cavo coax
4	1	COAX2	RG178	Cavo coax
5	4	CPT1,CPT2,CPT3,CPT4	1n	Filtro passante 1nF
6	1	CS1	CSPA30WMOS01	Circuito stampato
7	14	C1,C2,C3,C4,C5,C6,C10,C20,C29,C30,C45,C49,C50,C69	4n7	COND. CER. 0805 4NF7 X7R 50V +/-10
8	2	C7,C35	4n7-50V	COND. CER. 1206 4NF7 X7R 50V +/-10
9	14	C8,C24,C43,C54,C63,C64,C65,C66,C67,C68,C70,C71,C73,C74	NC	Cond. SMD 0805 COG
10	1	C9	7_50p	COMP. FILM VAR. 7/50PF SMD TZBX4R5
11	4	C11,C19,C40,C77	100n	COND. CER. 0805 100NF X7R 50V +/-10
12	7	C12,C14,C16,C23,C28,C38,C44	NC	Cond. SMD 1212 HQ
13	2	C13,C15	1p	COND.CHIP ALTO Q 1PF +-0,25PF 500V
14	4	C17,C18,C37,C39	10uF	COND.ELET.SMD 4X5.5 10UF 16V 85ø
15	1	C21	47p	COND. CER. 0805 47PF COG 50V +/-5
16	3	C22,C42,C60	22p	COND.CHIP ALTO Q 22PF 5% 500V
17	1	C25	100uF 35V	COND.ELET.SMD 6.3X8 100UF 35V 85ø
18	7	C26,C34,C41,C46,C47,C55,C58	470p	Cond. SMD 1212 HQ
19	2	C27,C36	100n50V	COND. CER. 1206 100NF X7R 50V +/-10
20	7	C31,C32,C51,C52,C53,C75,C76	470p	COND. CER. 0805 470PF COG 50V +/-5
21	4	C33,C48,C61,C62	68p	COND.CHIP ALTO Q 68PF 5% 500V
22	2	C56,C59	27p	COND. CER. 0805 27PF COG 50V +/-5
23	1	C57	560p	Cond. SMD 1212 HQ
24	1	C72	NC	Cond. SMD 0805
25	1	C78	4p7	Cond. SMD 1212 HQ
26	1	C79	220n	Cond. SMD 1210 LowESR
27	1	DCPLR1	DIR_CPLR	BOB. SU NUCLEO KITFTR1010SP
28	2	D1,D2	HSMS2800	DIODO SIL.HSMS2800 SCHOTTKY SOT23
29	3	D3,D4,D11	9V1	DIODO ZENER 9V1 MELF
30	6	D5,D6,D7,D8,D9,D10	SM4004	DIODO SMD 4007/GS1M T/R DO214AC
31	1	D12	HSMP3810	DIODO SIL.HSMP3810 PIN SOT23
32	2	J1,J2	JSMD	Pad SMD a saldare
33	1	L1	18nH	BOB.IN ARIA RAME SMALTATO 18NH
34	1	L2	35nH	3SP.FILO D.1MM AVV.SU D.5MM , L=7mm
35	1	L3	95nH	6SP.FILO D1MM AVV.SU D.5mm, L=13,5mm
36	1	L4	VK200	IMPEDENZA VK200 ASSIALE
37	1	L5	85nH	5SP.FILO D1MM AVV.SU D.5mm, L=13mm
38	2	L6,L10	2uH2	IMPEDENZA 2,2 MICRO HENRY SMD 1812
39	3	L7,L12,L14	NC	Induttanza SMD 3225 (1210)
40	1	L8	75nH	4SP.FILO D1MM AVV.SU D.5mm, L=9mm
41	1	L9	68nH	4SP.FILO D1MM AVV.SU D.5mm, L=6mm
42	1	L11	47nH	IMPEDENZA 0,047UH SMD 1210
43	1	L13	25nH	3SP.FILO D.1MM AVV.SU D.5MM , L=15mm
44	1	L15	175nH	9SP.FILO D1MM AVV.SU D.5mm, L=13mm
45	1	MOS1	MRF137	Power mosfet RF - MACOM_MRF137
46	1	PD1	PAD	
47	4	Q1,Q2,Q3,Q4	BFG35	TRANS. SMD CASE SOT223 BFG35
48	1	RV1	1k	TRIM.MULTI.REG.VER. 1K SMD
49	2	R1,R2	10k	RES. CHIP 0805 1% 10K
50	3	R3,R4,R11	1k	RES. CHIP 0805 1% 1K
51	2	R5,R8	47R	RES. CHIP 0805 1% 47H
52	16	R6,R7,R13,R15,R17,R19,R21,R23,R25,R27,R29,R34,R35,R36,R43,R73	51R1W	RES. CHIP 2512 1% 51H 1W
53	2	R9,R81	22R	RES. CHIP 0805 1% 22H
54	15	R10,R12,R47,R48,R49,R50,R67,R68,R69,R70,R71,R84,R85,R86,R87	180R	RES. CHIP 0805 1% 180H
55	9	R14,R16,R20,R22,R26,R28,R37,R38,R39	22R1W	RES. CHIP 2512 5% 22H 1W
56	2	R18,R57	1k5	RES. CHIP 0805 1% 1K5
57	1	R24	56R	RES. CHIP 0805 1% 56H
58	6	R30,R33,R55,R58,R79,R80	2R2	RES. CHIP 0805 1% 2H2
59	6	R31,R32,R41,R42,R44,R54	270R	RES. CHIP 0805 1% 270H
60	4	R40,R64,R82,R83	4R7	RES. CHIP 0805 1% 4H7
61	1	R45	220R	RES. CHIP 0805 1% 220H
62	4	R46,R61,R66,R75	51R	RES. CHIP 0805 1% 51H
63	3	R51,R53,R76	NC	Res. SMD 2512
64	1	R52	6k8	RES. CHIP 0805 1% 6K8
65	2	R56,R60	390R	RES. CHIP 0805 1% 390H
66	1	R59	4k7	RES. CHIP 0805 1% 4K7
67	2	R62,R63	2R21W	RES. CHIP 2512 5% 2H2 1W
68	2	R65,R74	NC	Res. SMD 0805
69	1	R72	100R	RES. CHIP 0805 1% 100H
70	2	R77,R78	10R	RES. CHIP 0805 1% 10H
71	1	R88	22R	RES. CHIP 2010 5% 22H
72	1	R89	NC	Res. 2W
73	1	R90	22R	RES. STRATO METALLICO 2W. 5% 22H
74	1	R91	1k	RES. CHIP 0805 1% 1K
75	1	R92	820R	RES. STRATO METALLICO 2W. 5% 820H
76	2	R93,R94	1K5	RES. STRATO METALLICO 2W. 5% 1K5
77	11	TL1,TL2,TL3,TL4,TL5,TL6,TL7,TL8,TL9,TL10,TL11	TL	Linea strip CS
78	5	W1,W2,W3,W4,W7	WIRE	Filo a saldare

SLCNTMOS06.DDS30



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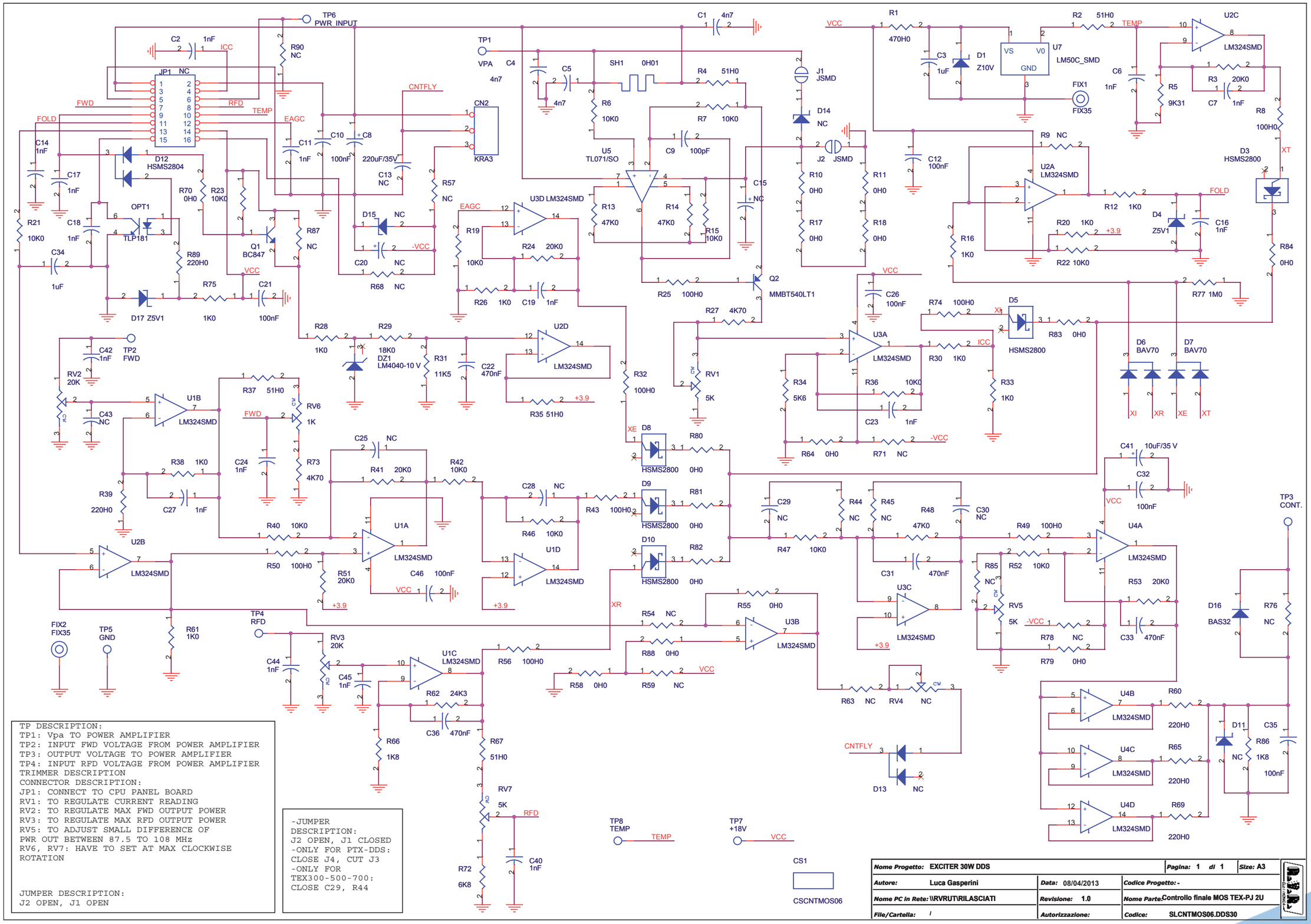
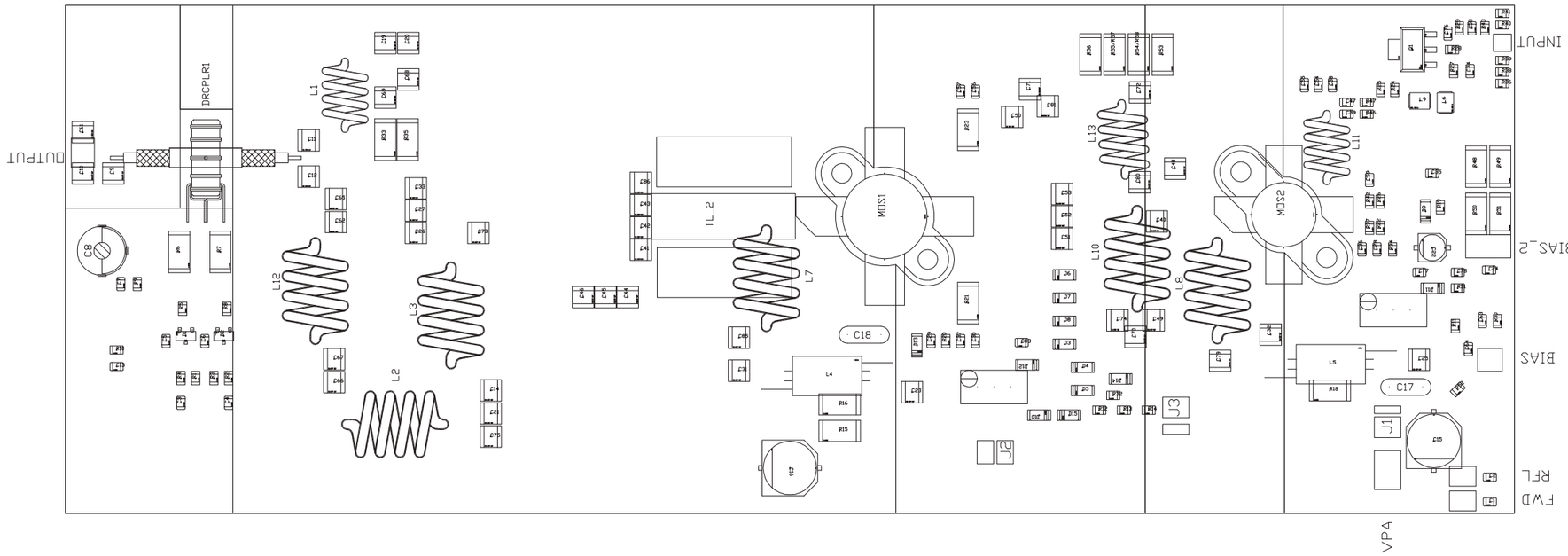


SLCNTMOS06.DDS30

Controllo finale MOS TEX-PJ 2U Revised: 08/04/2013
SLCNTMOS06.DDS30 Revision: 1.0
EXCITER 30W DDS
Luca Gasperini

Item	Quantity	Reference	Part	Description
1	1	CN2	KRA3	Conn. tipo KRA a 3 poli
2	1	CS1	CSCNTMOS06	Circuito stampato
3	3	C1, C4, C5	4n7	Cond. SMD 0805
4	16	C2, C6, C7, C11, C14, C16, C17, C18, C19, C23, C24, C27, C40, C42, C44, C45	1nF	Cond. SMD 0805
5	2	C3, C34	1uF	Cond. SMD 0805
6	1	C8	220uF/35V	Cond. Elettr. Dia 10 P5.08
7	1	C9	100pF	Cond. SMD 0805
8	7	C10, C12, C21, C26, C32, C35, C46	100nF	Cond. SMD 0805
9	6	C13, C25, C28, C29, C30, C43	NC	Cond. SMD 0805
10	1	C15	NC	Cond. Elettr. Dia 5 P2.54
11	1	C20	NC	Cond. Elett. SMD d. 4mm
12	4	C22, C31, C33, C36	470nF	Cond. SMD 0805
13	1	C41	10uF/35 V	Cond. Elett. SMD d. 4mm
14	1	DZ1	LM4040-10 V	Diodi Zener SMD SOT23
15	1	D1	Z10V	MINIMELF SMD Zener Diode
16	5	D3, D5, D8, D9, D10	HSMS2800	Diodo Shottky SOT23
17	2	D4, D17	Z5V1	MINIMELF SMD Zener Diode
18	2	D6, D7	BAV70	Doppio Diodo SMD SOT23
19	3	D11, D14, D15	NC	MINIMELF SMD Zener Diode
20	1	D12	HSMS2804	Doppio Diodo SMD SOT23
21	1	D13	NC	Doppio Diodo SMD SOT23
22	1	D16	BAS32	MINIMELF SMD Diode
23	2	FIX1, FIX2	FIX35	Foro fissaggio 3.5mm
24	1	JP1	NC	Connettore 16 poli Flat cs
25	2	J1, J2	JSMD	Pad SMD a saldare
26	1	OPT1	TLP181	Optoisolatore SMD SO6
27	1	Q1	BC847	Trans. NPN SOT23
28	1	Q2	MMBT540LT1	Trans. PNP SOT23
29	3	RV1, RV5, RV7	5K	Trimmer SMD
30	2	RV2, RV3	20K	Trimmer Rg V 3296W
31	1	RV4	NC	Trimmer SMD
32	1	RV6	1K	Trimmer SMD
33	1	R1	470H0	Res. SMD 0805
34	5	R2, R4, R35, R37, R67	51H0	Res. SMD 0805
35	5	R3, R24, R41, R51, R53	20K0	Res. SMD 0805
36	1	R5	9K31	Res. SMD 0805
37	13	R6, R7, R15, R19, R21, R22, R23, R36, R40, R42, R46, R47, R52	10K0	Res. SMD 0805
38	8	R8, R25, R32, R43, R49, R50, R56, R74	100H0	Res. SMD 0805
39	14	R9, R44, R45, R54, R57, R59, R63, R68, R71, R76, R78, R85, R87, R90	NC	Res. SMD 0805
40	15	R10, R11, R17, R18, R55, R58, R64, R70, R79, R80, R81, R82, R83, R84, R88	0H0	Res. SMD 0805
41	10	R12, R16, R20, R26, R28, R30, R33, R38, R61, R75	1K0	Res. SMD 0805
42	3	R13, R14, R48	47K0	Res. SMD 0805
43	2	R27, R73	4K70	Res. SMD 0805
44	1	R29	18K0	Res. SMD 0805
45	1	R31	11K5	Res. SMD 0805
46	1	R34	5K6	Res. SMD 0805
47	5	R39, R60, R65, R69, R89	220H0	Res. SMD 0805
48	1	R62	24K3	Res. SMD 0805
49	2	R66, R86	1K8	Res. SMD 0805
50	1	R72	6K8	Res. SMD 0805
51	1	R77	1M0	Res. SMD 0805
52	1	SH1	0H01	Shunt passo 15.2mm fori 2mm
53	1	TP1	VPA	Foro dia. 2mm
54	1	TP2	FWD	Foro dia. 1mm
55	1	TP3	CONT.	Foro dia. 1mm
56	1	TP4	RFD	Foro dia. 1mm
57	1	TP5	GND	Foro dia. 2mm
58	1	TP6	PWR_INPUT	Foro dia. 1mm
59	1	TP7	+18V	Foro dia. 1mm
60	1	TP8	TEMP	Foro dia. 1mm
61	4	U1, U2, U3, U4	LM324SMD	Quad Op. SMD SO14
62	1	U5	TL071/SO	Dual Op. SMD SO8
63	1	U7	LM50C_SMD	Temperature sensor

SLPA150TEXR2

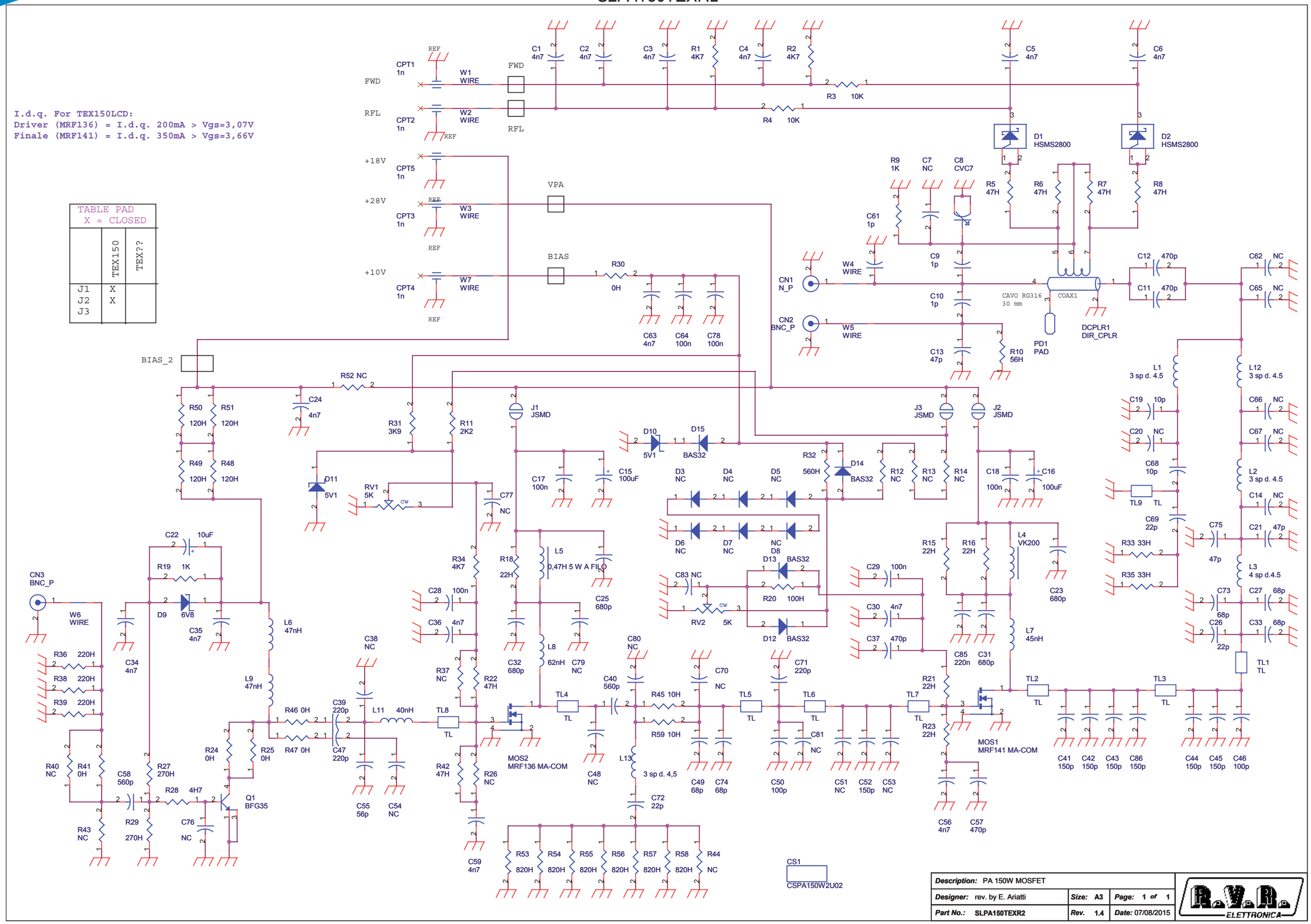


PART NAME :	PA 100/150W - PTXLCD MOS MA-COM
DATE : 06/08/2015	REVISION : 1.0 | SCALE : 1:1 | SIZE : A4 | PAGE : 1 DI 1
PROJECT CODE : <>	DOCUMENT CODE : SLPA150PTXR3
PRODUCT NAME :	PTX-LCD
DESIGNER :	M. UCELLI, E. ARIATTI
ARCHIVING :	"RVRUT" SERVER, "RILASCIATI" FOLDER

SLPA150TEXR2

I.d.q. For TEX150LCD:
Driver (MRF136) = I.d.q. 200mA > Vgs=3,07V
Finale (MRF141) = I.d.q. 350mA > Vgs=3,66V

TABLE PAD X = CLOSED	TEX150	TEX??
J1	X	
J2	X	
J3		

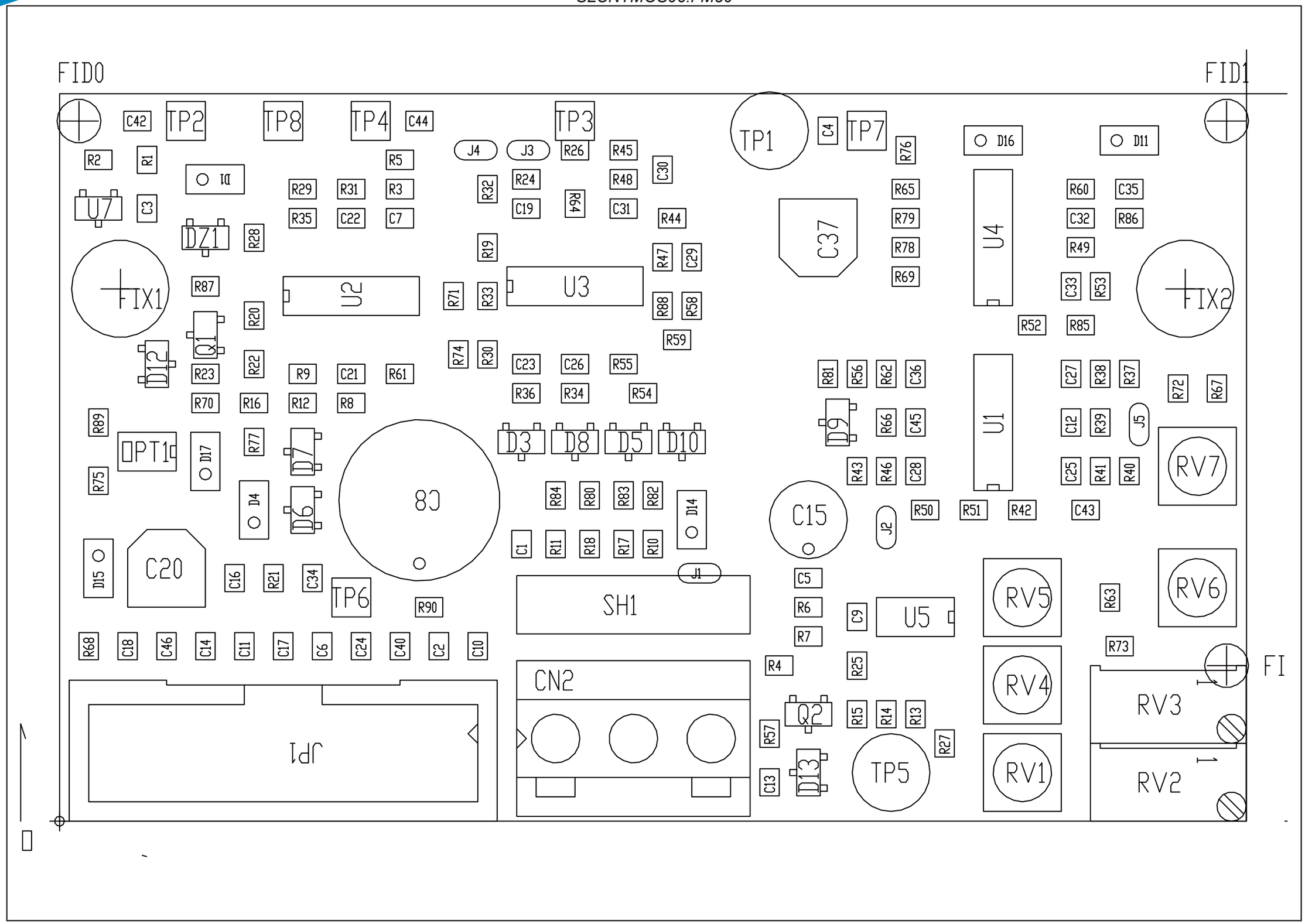


SLPA150TEXR2

PA 150W MOSFET
SLPA150TEXR2 Rev.1.4
DATE: 07/08/2015
Rev. by E. Ariatti

Item	Quantity	Reference	Part	Description
1	1	CN1	N_P	Conn. N da pannello
2	2	CN2,CN3	BNC_P	Conn. BNC da pannello
3	5	CPT1,CPT2,CPT3,CPT4,CPT5	1n	Cond. passante
4	1	CS1	CSPA150W2U02	Circuito stampato
5	14	C1,C2,C3,C4,C5,C6,C24,C30,C34,C35,C36,C56,C59,C63	4n7	Cond. SMD 0805 COG
6	3	C7,C38,C54	NC	Cond. SMD 0805 COG
7	1	C8	5-30pF	Comp. ceramico dia. 7mm
8	3	C9,C10,C61	1p	Cond. SMD 1212 HQ
9	2	C11,C12	470p	Cond. SMD 1212 HQ
10	1	C13	47p	Cond. SMD 0805 COG
11	13	C14,C20,C48,C51,C53,C62,C65,C66,C67,C70,C79,C80,C81	NC	Cond. SMD 1212 HQ
12	2	C15,C16	100uF	Cond. Elett. SMD d. 6.3mm
13	2	C17,C18	100n	Cond. ceramico multistrato p 5mm
14	2	C19,C68	10p	Cond. SMD 1212 HQ
15	2	C21,C75	47p	Cond. SMD 1212 HQ
16	1	C22	10uF	Cond. Elett. SMD d. 5mm
17	4	C23,C25,C31,C32	680p	Cond. SMD 1212 HQ
18	3	C26,C69,C72	22p	Cond. SMD 1212 HQ
19	5	C27,C33,C49,C73,C74	68p	Cond. SMD 1212 HQ
20	4	C28,C29,C64,C78	100n	Cond. SMD 0805 COG
21	2	C37,C57	470p	Cond. SMD 0805 COG
22	2	C39,C47	220p	Cond. SMD 0805 COG
23	1	C40	560p	Cond. SMD 1212 HQ
24	7	C41,C42,C43,C44,C45,C52,C86	150p	Cond. SMD 1212 HQ
25	2	C46,C50	100p	Cond. SMD 1212 HQ
26	1	C55	56p	Cond. SMD 0805 COG
27	1	C58	560p	Cond. SMD 0805 COG
28	1	C71	220p	Cond. SMD 1212 HQ
29	3	C76,C77,C83	NC	Cond. SMD 0805
30	1	C85	220n	Cond. SMD 1210 LowESR
31	1	DCPLR1	DIR_CPLR	BOB. SU NUCLEO KITFTR1010SP
32	2	D1,D2	HSMS2800	Diodo Hot Carrier SOT23
33	6	D3,D4,D5,D6,D7,D8	NC	MINIMELF SMD Diode
34	1	D9	6V8	MINIMELF SMD Zener Diode
35	2	D10,D11	5V1	MINIMELF SMD Zener Diode
36	4	D12,D13,D14,D15	BAS32	MINIMELF SMD Diode
37	3	J1,J2,J3	JSMD	Pad SMD a saldare
38	1	L1	3 sp d. 4,5 pass.1	Induttanza cilindrica
39	2	L2,L12	3 sp d. 4,5 pass.5	Induttanza cilindrica
40	1	L3	4 sp d.4.5	Induttanza cilindrica
40	1	L4	VK200	Induttanza cilindrica VK200
41	1	L5	0,47H 5 W A FILO	Induttanza cilindrica VK200
42	2	L6,L9	47nH	Induttanza SMD 3225 (1210)
43	1	L7	45nH	Induttanza cilindrica
44	1	L8	62nH	Induttanza cilindrica
45	1	L11	40nH	Induttanza cilindrica
46	1	L13	3 sp d. 4,5	Induttanza cilindrica
47	1	MOS1	MRF141 MA-COM	Power mosfet RF_MACOM
48	1	MOS2	MRF136 MA-COM	Power mosfet RF_MACOM
49	1	PD1	PAD	Pad SMD saldare
50	1	Q1	BFG35	Trans. NPN SOT223
51	2	RV1,RV2	5K	Trimmer Rg V 3296W
52	3	R1,R2,R34	4K7	Res. SMD 0805
53	2	R3,R4	10K	Res. SMD 0805
54	4	R5,R8,R22,R42	47H	Res. SMD 0805
55	2	R6,R7	47H	Res. SMD 2512
56	2	R9,R19	1K	Res. SMD 0805
57	1	R10	56H	Res. SMD 0805
58	1	R11	2K2	Res. SMD 0805
59	8	R12,R13,R14,R26,R37,R40,R43,R52	NC	Res. SMD 0805
60	5	R15,R16,R18,R21,R23	22H	Res. SMD 2512
61	1	R20	100H	Res. SMD 0805
62	6	R24,R25,R30,R41,R46,R47	0H	Res. SMD 0805
63	2	R27,R29	270H	Res. SMD 0805
64	1	R28	4H7	Res. SMD 0805
65	1	R31	3K9	Res. SMD 0805
66	1	R32	560H	Res. SMD 0805
67	2	R33,R35	33H	Res. SMD 2512

SLCNTMOS06.FM50



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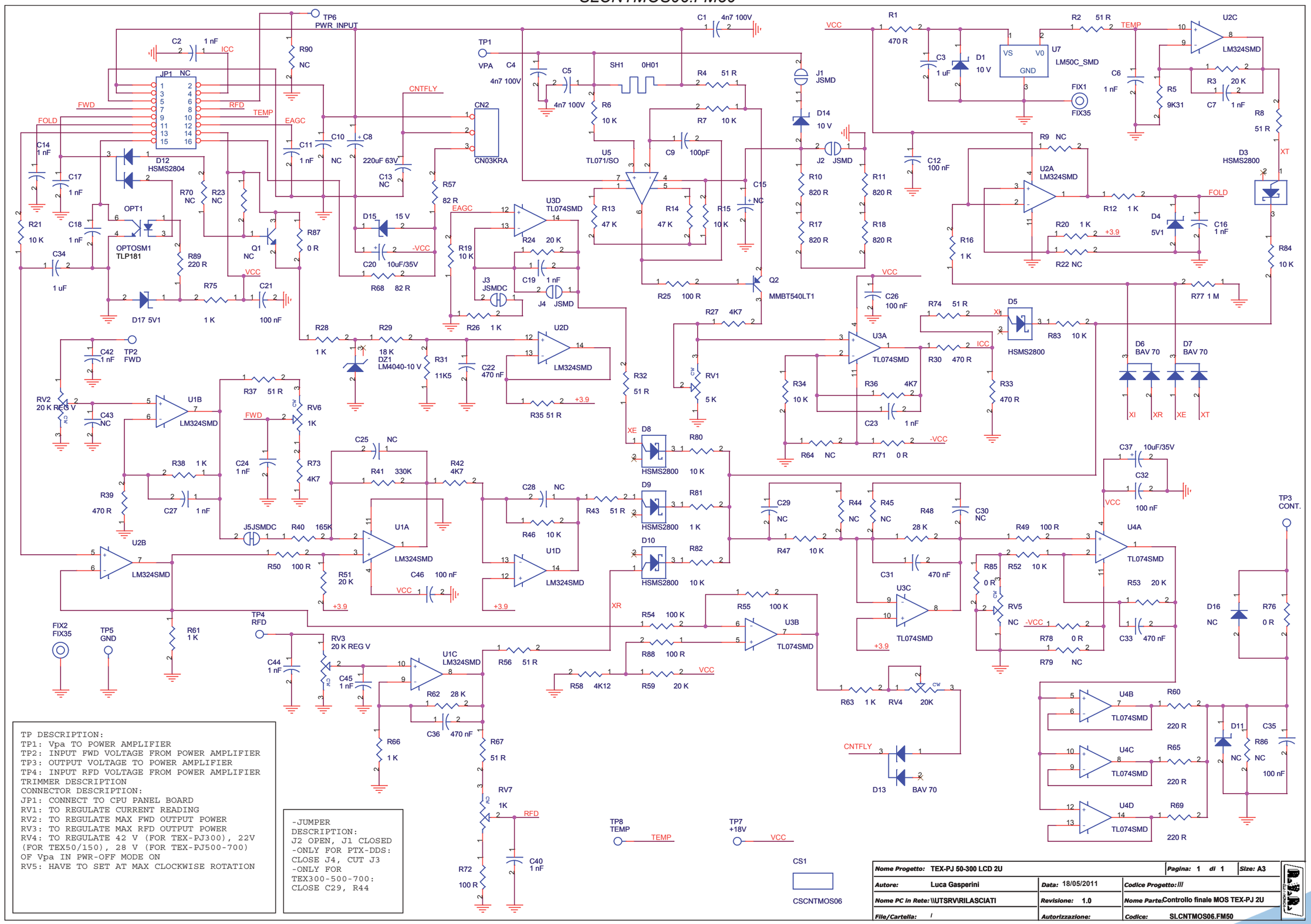


TP DESCRIPTION:
TP1: Vpa TO POWER AMPLIFIER
TP2: INPUT FWD VOLTAGE FROM POWER AMPLIFIER
TP3: OUTPUT VOLTAGE TO POWER AMPLIFIER
TP4: INPUT RFD VOLTAGE FROM POWER AMPLIFIER
TRIMMER DESCRIPTION
CONNECTOR DESCRIPTION:
JP1: CONNECT TO CPU PANEL BOARD
RV1: TO REGULATE CURRENT READING
RV2: TO REGULATE MAX FWD OUTPUT POWER
RV3: TO REGULATE MAX RFD OUTPUT POWER
RV4: TO REGULATE 42 V (FOR TEX-PJ300), 22V (FOR TEX50/150), 28 V (FOR TEX-PJ500-700) OF Vpa IN PWR-OFF MODE ON
RV5: HAVE TO SET AT MAX CLOCKWISE ROTATION

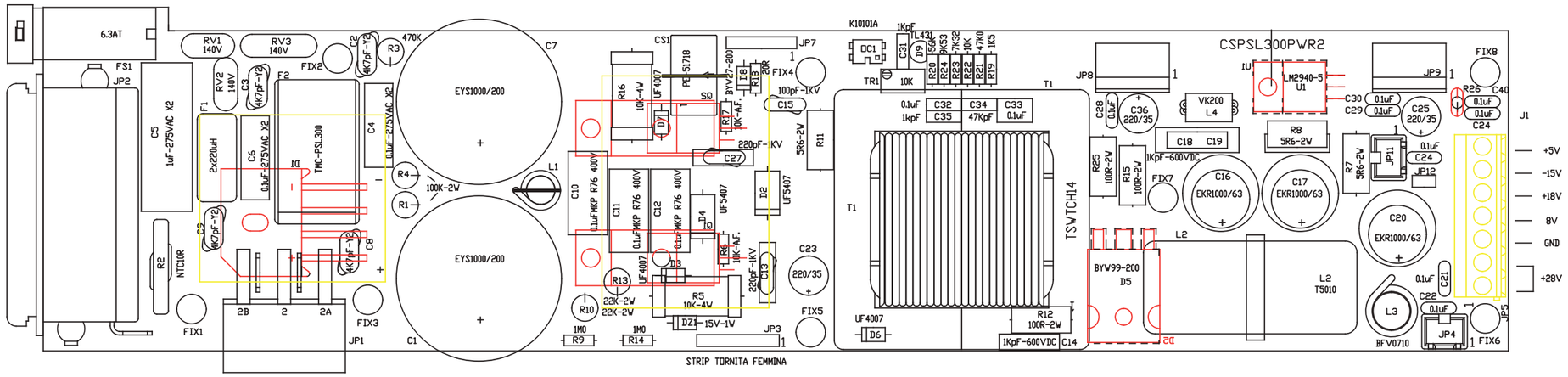
-JUMPER DESCRIPTION:
J2 OPEN, J1 CLOSED -ONLY FOR PTX-DDS:
CLOSE J4, CUT J3 -ONLY FOR TEX300-500-700:
CLOSE C29, R44

Nome Progetto: TEX-PJ 50-300 LCD 2U		Pagina: 1 di 1	Size: A3
Autore: Luca Gasperini	Data: 18/05/2011	Codice Progetto: ///	
Nome PC in Rete: \\UTSRV\RILASCIATI	Revisione: 1.0	Nome Parte: Controllo finale MOS TEX-PJ 2U	
File/Cartella: /	Autorizzazione:	Codice: SLCNTMOS06.FM50	

Controllo finale MOS TEX-PJ 2U Revised: Wednesday, May 18, 2011
SLCNTMOS06.FM50 Revision: 1.0
TEX-PJ 50-300 LCD 2U
Luca Gasperini

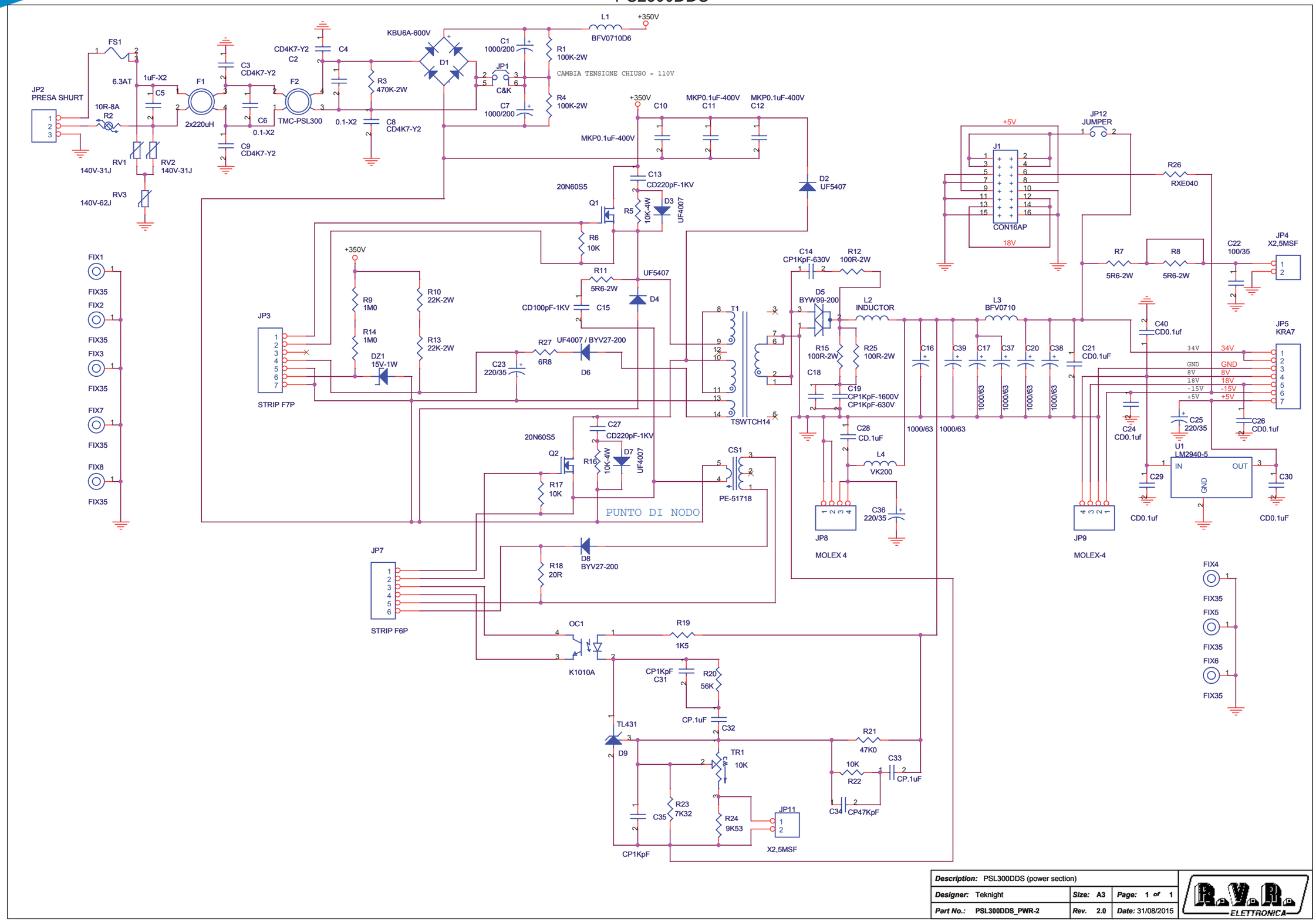
Item	Quantity	Reference	Part	Description
1	1	CN2	CN03KRA	Conn. tipo KRA a 3 poli
2	1	CS1	CSCNTMOS06	Circuito stampato
3	3	C1, C4, C5	4n7 100V	Cond. SMD 0805
4	16	C2, C6, C7, C11, C14, C16, C17, C18, C19, C23, C24, C27, C40, C42, C44, C45	1 nF	Cond. SMD 0805
5	2	C3, C34	1 uF	Cond. SMD 0805
6	1	C8	220uF 63V	Cond. Elettr. Dia 10 P5.08
7	1	C9	100pF	Cond. SMD 0805
8	7	C10, C13, C25, C28, C29, C30, C43	NC	Cond. SMD 0805
9	6	C12, C21, C26, C32, C35, C46	100 nF	Cond. SMD 0805
10	1	C15	NC	Cond. Elettr. Dia 5 P2.54
11	2	C20, C37	10uF/35V	
12	4	C22, C31, C33, C36	470 nF	Cond. SMD 0805
13	1	DZ1	LM4040-10 V	Diodi Zener SMD SOT23
14	2	D1, D14	10 V	MINIMELF SMD Zener Diode
15	5	D3, D5, D8, D9, D10	HSMS2800	Diodo Shottky SOT23
16	2	D4, D17	5V1	MINIMELF SMD Zener Diode
17	3	D6, D7, D13	BAV 70	Doppio Diodo SMD SOT23
18	1	D11	NC	MINIMELF SMD Zener Diode
19	1	D12	HSMS2804	Doppio Diodo SMD SOT23
20	1	D15	15 V	MINIMELF SMD Zener Diode
21	1	D16	NC	MINIMELF SMD Diode
22	2	FIX1, FIX2	FIX35	Foro fissaggio 3.5mm
23	1	JP1	NC	Connettore 16 poli Flat cs
24	2	J1, J2	JSMD	Pad SMD a saldare
25	2	J3, J5	JSMDC	
26	1	J4	JSMD	
27	1	OPT1	OPTOSM1	Optoisolatore SMD SO6
28	1	Q1	NC	Trans. NPN SOT23
29	1	Q2	MMBT540LT1	Trans. PNP SOT23
30	1	RV1	5 K	Trimmer SMD
31	2	RV2, RV3	20 K REG V	Trimmer Rg V 3296W
32	1	RV4	20K	Trimmer SMD
33	1	RV5	NC	Trimmer SMD
34	2	RV6, RV7	1K	Trimmer SMD
35	4	R1, R30, R33, R39	470 R	Res. SMD 0805
36	10	R2, R4, R8, R32, R35, R37, R43, R56, R67, R74	51 R	Res. SMD 0805
37	5	R3, R24, R51, R53, R59	20 K	Res. SMD 0805
38	1	R5	9K31	Res. SMD 0805
39	13	R6, R7, R15, R19, R21, R34, R46, R47, R52, R80, R82, R83, R84	10 K	Res. SMD 0805
40	9	R9, R22, R23, R44, R45, R64, R70, R79, R86	NC	Res. SMD 0805
41	4	R10, R11, R17, R18	820 R	Res. SMD 0805
42	11	R12, R16, R20, R26, R28, R38, R61, R63, R66, R75, R81	1 K	Res. SMD 0805
43	2	R13, R14	47 K	Res. SMD 0805
44	5	R25, R49, R50, R72, R88	100 R	Res. SMD 0805
45	4	R27, R36, R42, R73	4K7	Res. SMD 0805
46	1	R29	18 K	Res. SMD 0805
47	1	R31	11K5	Res. SMD 0805
48	1	R40	165K	Res. SMD 0805
49	1	R41	330K	Res. SMD 0805
50	2	R48, R62	28 K	Res. SMD 0805
51	2	R54, R55	100 K	Res. SMD 0805
52	2	R57, R68	82 R	Res. SMD 0805
53	1	R58	4K12	Res. SMD 0805
54	4	R60, R65, R69, R89	220 R	Res. SMD 0805
55	5	R71, R76, R78, R85, R87	0 R	Res. SMD 0805
56	1	R77	1 M	Res. SMD 0805
57	1	R90	NC	
58	1	SH1	0H01	Shunt passo 15.2mm fori 2mm
59	1	TP1	VPA	Foro dia. 2mm
60	1	TP2	FWD	Foro dia. 1mm
61	1	TP3	CONT.	Foro dia. 1mm
62	1	TP4	RFD	Foro dia. 1mm
63	1	TP5	GND	Foro dia. 2mm
64	1	TP6	PWR_INPUT	Foro dia. 1mm
65	1	TP7	+18V	Foro dia. 1mm
66	1	TP8	TEMP	Foro dia. 1mm
67	2	U1, U2	LM324SMD	Quad Op. SMD SO14
68	2	U3, U4	TL074SMD	Quad Op. SMD SO14
69	1	U5	TL071/SO	Dual Op. SMD SO8
70	1	U7	LM50C_SMD	Temperature sensor

PSL300DDS



ELETTRONICA	PRODUCT NAME : <>		PART NAME : PSL300DDS (POWER SECTION)			
	DESIGNER : TEKNIGHT	DATE 31/08/15	REVIS. : 2.0	SCALE 1:1	SIZE A3	PAGE :1 DI 1
ARCHIVING :'RVRUT' SERVER, 'RILASCIATI' FOLDER	PROJECT CODE : <>	DOCUMENT CODE : PSL300DDS_PWR-2				

PSL300DDS



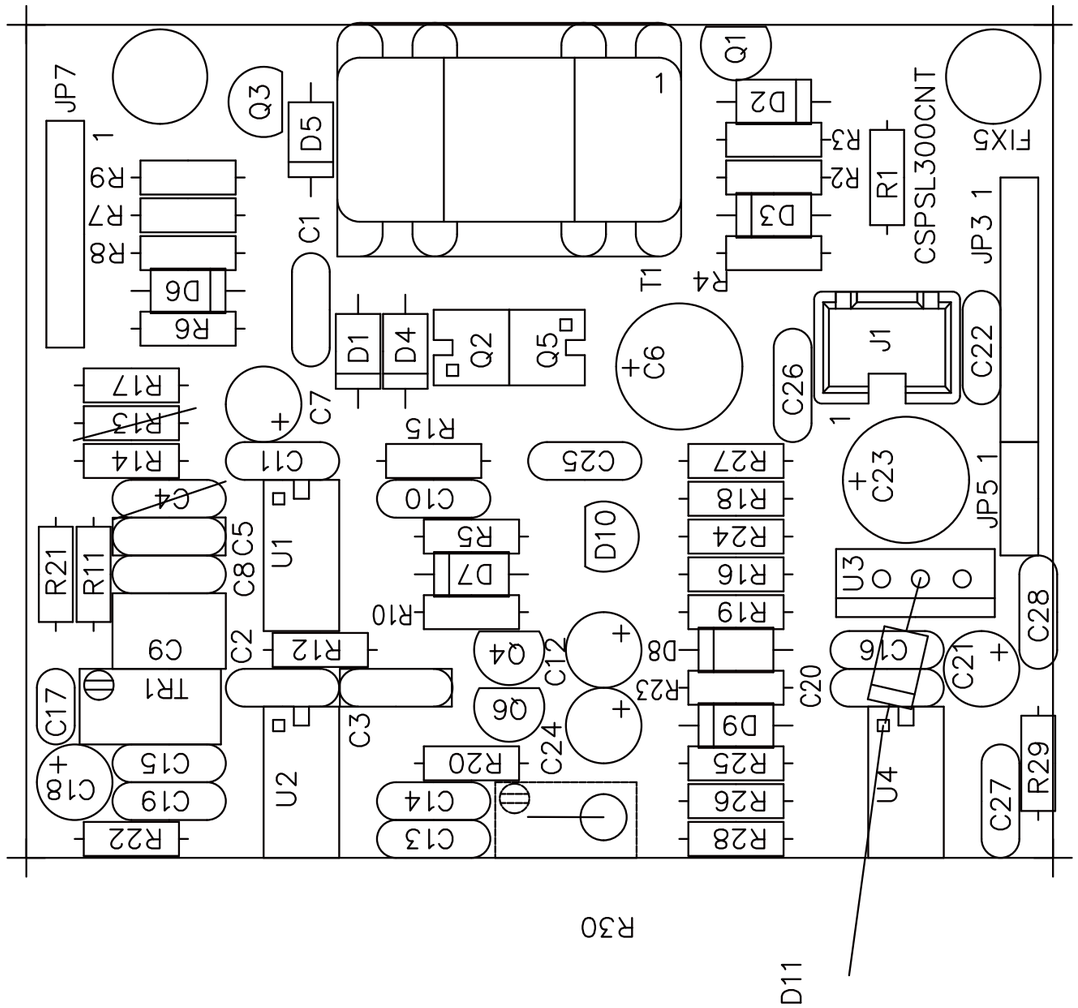
Description: PSL300DDS (power section)			
Designer: Teknight	**Size:** A3	**Page:** 1 of 1	
Part No.: PSL300DDS_PWR-2	**Rev.** 2.0	**Date:** 31/08/2015	

PSL300DDS

POWER PSL 300 DDS Revised: Monday, August 31, 2015
PSL300DDS_PWR-2 Revision: 2
Teknight

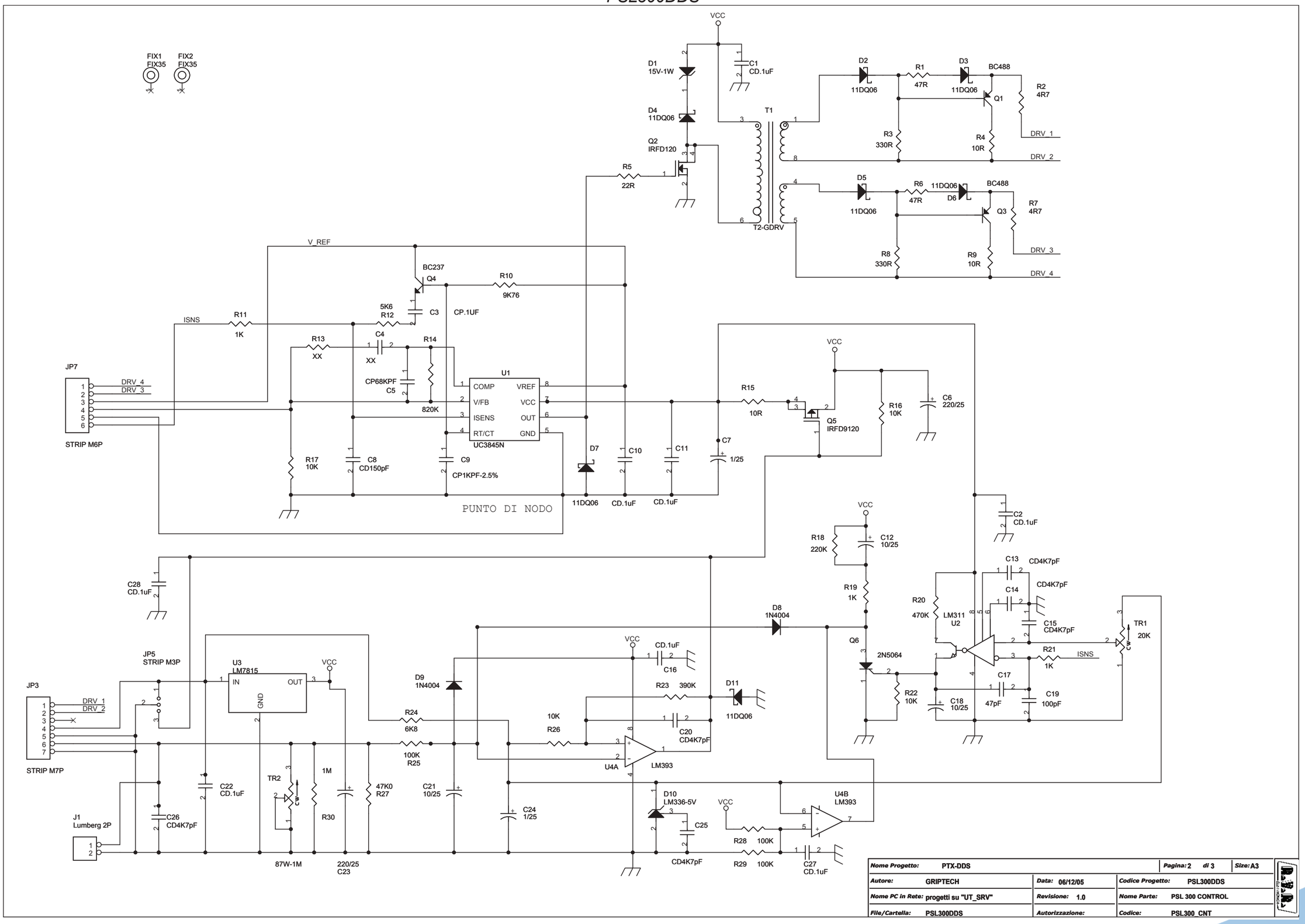
Item	Quantity	Reference	Part
1	1	CS1	PE-51718
2	2	C1, C7	1000/200
3	4	C2, C3, C8, C9	CD4K7-Y2
4	2	C4, C6	0.1-X2
5	1	C5	1uF-X2
6	3	C10, C11, C12	MKP0.1uF-400V
7	2	C27, C13	CD220pF-1KV
8	2	C14, C18	CP1KpF-630V
9	1	C15	CD100pF-1KV
10	6	C16, C17, C20, C37, C38, C39	1000/63
11	1	C19	CP1KpF-1600V
12	6	C21, C24, C26, C29, C30, C40	CD0.1uf
13	1	C22	100/35
14	3	C23, C25, C36	220/35
15	1	C28	CD.1uF
16	2	C31, C35	CP1KpF
17	2	C32, C33	CP.1uF
18	1	C34	CP47KpF
19	1	DZ1	15V-1W
20	1	D1	KBU6A-600V
21	2	D4, D2	UF5407
22	2	D3, D7	UF4007
23	1	D5	BYW99-200
24	1	D6	UF4007 / BYV27-200
25	1	D8	BYV27-200
26	1	D9	TL431
27	8	FIX1, FIX2, FIX3, FIX4, FIX5, FIX6, FIX7, FIX8	FIX35
28	1	FS1	6.3AT
29	1	F1	2x220uH
30	1	F2	TMC-PSL300
31	1	JP1	C&K
32	1	JP2	PRESA SHURT
33	1	JP3	STRIP F7P
34	2	JP4, JP11	X2,5MSF
35	1	JP5	KRA7
36	1	JP7	STRIP F6P
37	1	JP8	MOLEX 4
38	1	JP9	MOLEX-4
39	1	JP12	JUMPER
40	1	J1	CON16AP
41	1	L1	BFV0710D6
42	1	L2	INDUCTOR
43	1	L3	BFV0710
44	1	L4	VK200
45	1	OC1	K1010A
46	2	Q2, Q1	20N60S5
47	2	RV1, RV2	140V-31J
48	1	RV3	140V-62J
49	2	R4, R1	100K-2W
50	1	R2	10R-8A
51	1	R3	470K-2W
52	2	R16, R5	10K-4W
53	4	TR1, R6, R17, R22	10K
54	3	R7, R8, R11	5R6-2W
55	2	R14, R9	1M0
56	2	R13, R10	22K-2W
57	3	R12, R15, R25	100R-2W
58	1	R18	20R
59	1	R19	1K5
60	1	R20	56K
61	1	R21	47K0
62	1	R23	7K32
63	1	R24	9K53
64	1	R26	RXE040
65	1	R27	6R8
66	1	T1	TSWTCH14
67	1	U1	LM2940-5

PSL300DDS



NOME PARTE:	Control Card
DATA: 05/12/05	REVISIONE: 1.0 | SCALA: 2:1 | SIZE: A4 | PAGINA: 2 DI 3
NOME PROGETTO:	PTX-DDS
CODICE PROGETTO:	034
CODICE DISEGNO:	PSL300DDS
AUTORE:	U.T. - rev.: J. Berti
ARCHIVIAZIONE ELETTRONICA:	"CARTELLA PROGETTI" SU "UT_SRV"
PROFILO:	/
STATO:	/
MATERIALE:	/
TRATTAMENTO:	/

PSL300DDS



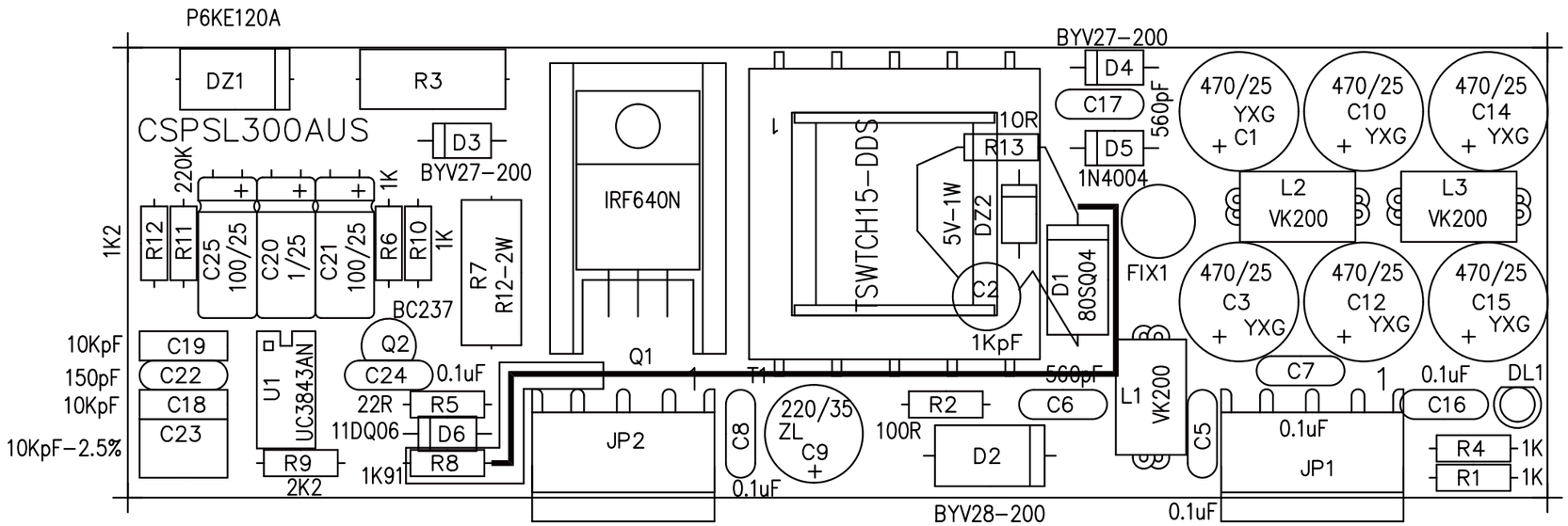
Nome Progetto:	PTX-DDS			Pagina: 2 di 3	Size: A3
Autore:	GRIPTECH	Data:	06/12/05	Codice Progetto:	PSL300DDS
Nome PC in Rete:	progetti su "UT_SRV"	Revisione:	1.0	Nome Parte:	PSL 300 CONTROL
File/Cartella:	PSL300DDS	Autorizzazione:		Codice:	PSL300_CNT

PSL300DDS

PSL300DDS
PSL 300 CONTROL
Revised: 06/12/2005
Revision: 1.0
U.T. - REV.: J.BERTI

Item	Quantity	Reference	Part
1	8	C1, C2, C10, C11, C16, C22, C27, C28	CD.1uF
2	1	C3	CP.1UF
3	2	C4, R13	XX
4	1	C5	CP68KPF
5	2	C6, C23	220/25
6	2	C7, C24	1/25
7	1	C8	CD150pF
8	1	C9	CP1KPF-2.5%
9	3	C12, C18, C21	10/25
10	6	C13, C14, C15, C20, C25, C26	CD4K7pF
11	1	C17	47pF
12	1	C19	100pF
13	1	D1	15V-1W
14	7	D2, D3, D4, D5, D6, D7, D11	11DQ06
15	2	D8, D9	1N4004
16	1	D10	LM336-5V
17	2	FIX1, FIX2	FIX35
18	1	JP3	STRIP M7P
19	1	JP5	STRIP M3P
20	1	JP7	STRIP M6P
21	1	J1	Lumberg 2P
22	2	Q1, Q3	BC488
23	1	Q2	IRFD120
24	1	Q4	BC237
25	1	Q5	IRFD9120
26	1	Q6	2N5064
27	2	R1, R6	47R
28	2	R2, R7	4R7
29	2	R3, R8	330R
30	3	R4, R9, R15	10R
31	1	R5	22R
32	1	R10	9K76
33	3	R11, R19, R21	1K
34	1	R12	5K6
35	1	R14	820K
36	4	R16, R17, R22, R26	10K
37	1	R18	220K
38	1	R20	470K
39	1	R23	390K
40	1	R24	6K8
41	3	R25, R28, R29	100K
42	1	R27	47K0
43	1	R30	1M
44	1	TR1	20K
45	1	TR2	87W-1M
46	1	T1	T2-GDRV
47	1	U1	UC3845N
48	1	U2	LM311
49	1	U3	LM7815
50	1	U4	LM393

PSL300DDS



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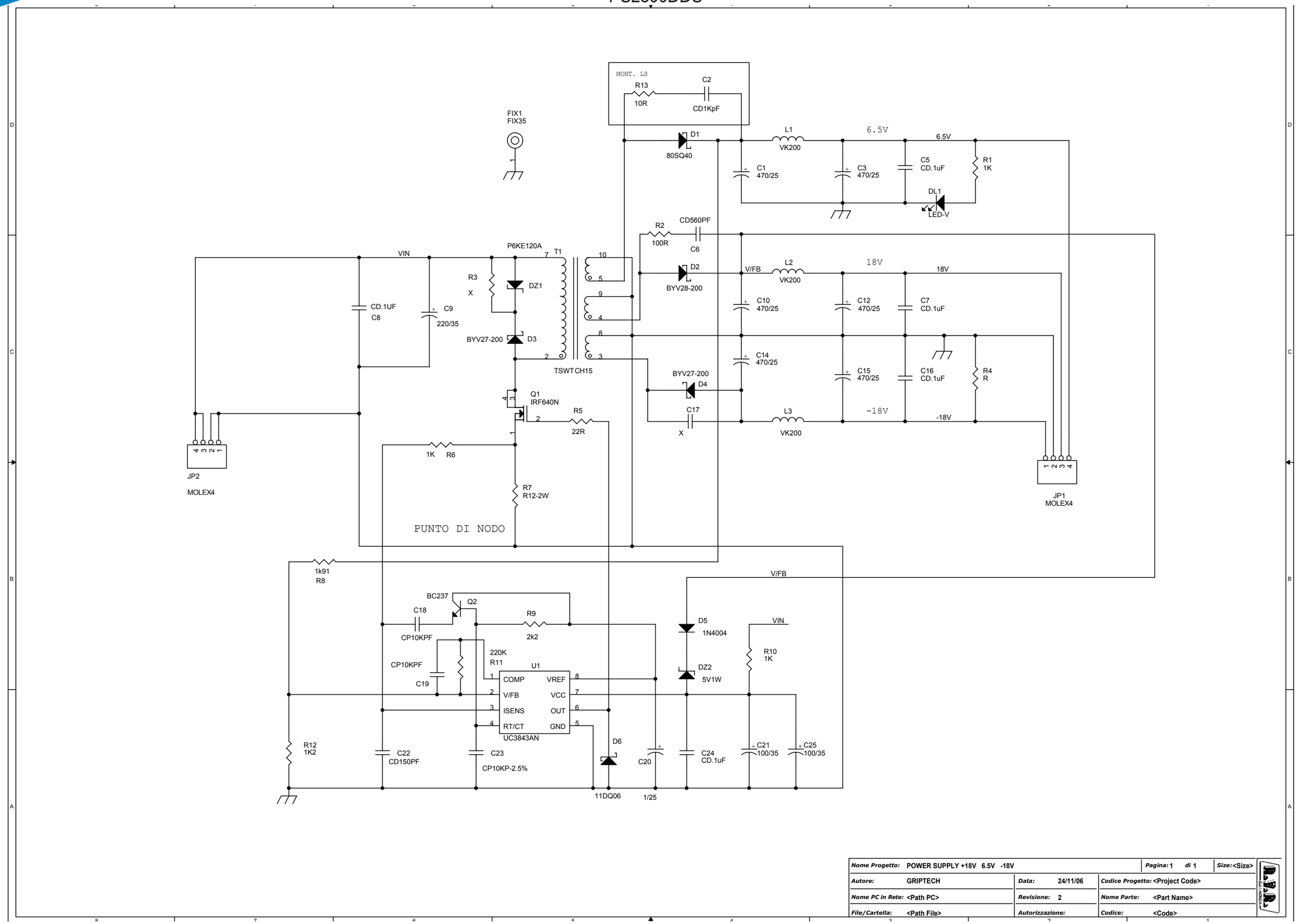
TITLE	PSL300 ALIMENTAZIONI AUSILIARIE
DOCUMENT NUMBER	PSL300_AUS_DDS_MNT_R2.DWG REV 2
DATE:	7 NOVEMBRE 2008

PSL300DDS

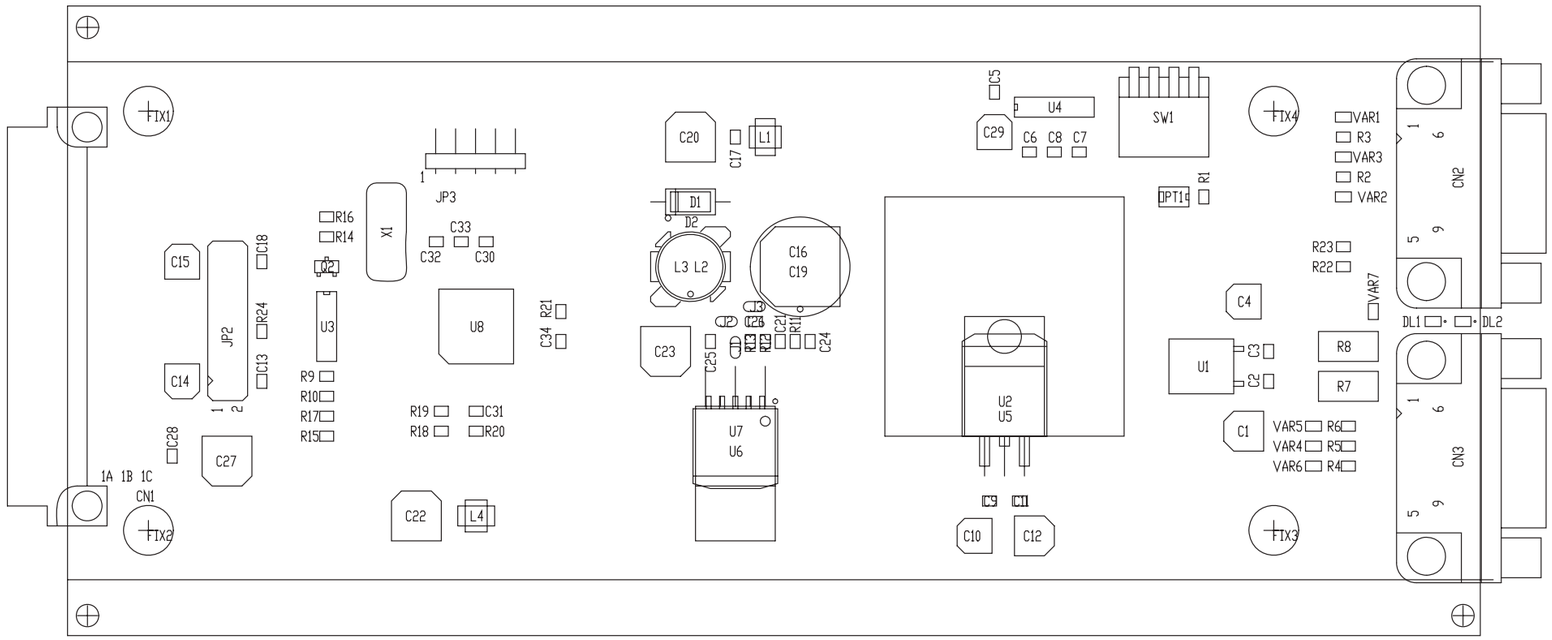


Nome Progetto: POWER SUPPLY +18V 6.5V -18V		Pagina: 1 di 1	Size: <Size>
Autore: GRIPTECH	Data: 24/11/06	Codice Progetto: <Project Code>	
Nome PC in Rete: <Path PC>	Revisione: 2	Nome Parte: <Part Name>	
File/Cartella: <Path File>	Autorizzazione:	Codice: <Code>	

PSL300DDS

PSL300DDS
POWER SUPPLY +18V 6.5V -18V
Revised: 24/11/2006
Revision: 2.0
U.T. - REV.: J.BERTI

Item	Quantity	Reference	Part
1	6	C1, C3, C10, C12, C14, C15	470/25
2	1	C2	CD1KpF
3	5	C5, C7, C8, C16, C24	CD.1uF
4	1	C6	CD560PF
5	1	C9	220/35
6	2	R3, C17	X
7	2	C18, C19	CP10KPF
8	1	C20	25-gen
9	2	C21, C25	100/35
10	1	C22	CD150PF
11	1	C23	CP10KP-2.5%
12	1	DL1	LED-V
13	1	DZ1	P6KE120A
14	1	DZ2	5V1W
15	1	D1	80SQ40
16	1	D2	BYV28-200
17	2	D3, D4	BYV27-200
18	1	D5	1N4004
19	1	D6	11DQ06
20	1	FIX1	FIX35
21	2	JP1, JP2	MOLEX4
22	3	L1, L2, L3	VK200
23	1	Q1	IRF640N
24	1	Q2	BC237
25	3	R1, R6, R10	1K
26	1	R2	100R
27	1	R4	R
28	1	R5	22R
29	1	R7	R12-2W
30	1	R8	1k91
31	1	R9	2k2
32	1	R11	220K
33	1	R12	1K2
34	1	R13	10R
35	1	T1	TSWTCH15
36	1	U1	UC3843AN



NOME PARTE: SCHEDA OPZIONE TELEMETRIA RS232

DATA: 09/02/2006 | REVISIONE: 1.0 | SCALA: 1:1 | SIZE: A4 | PAGINA: 1 DI 1

CODICE DISEGNO: SL034TL2002

PROFILO: <> | STATO: ESECUTIVO

NOME PROGETTO: PTX-DDS

AUTORE: TOMMASI

ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "UTSRV"

MATERIALE: <> | TRATTAMENTO: <>

CODICE PROGETTO: 034

SL034TL2002

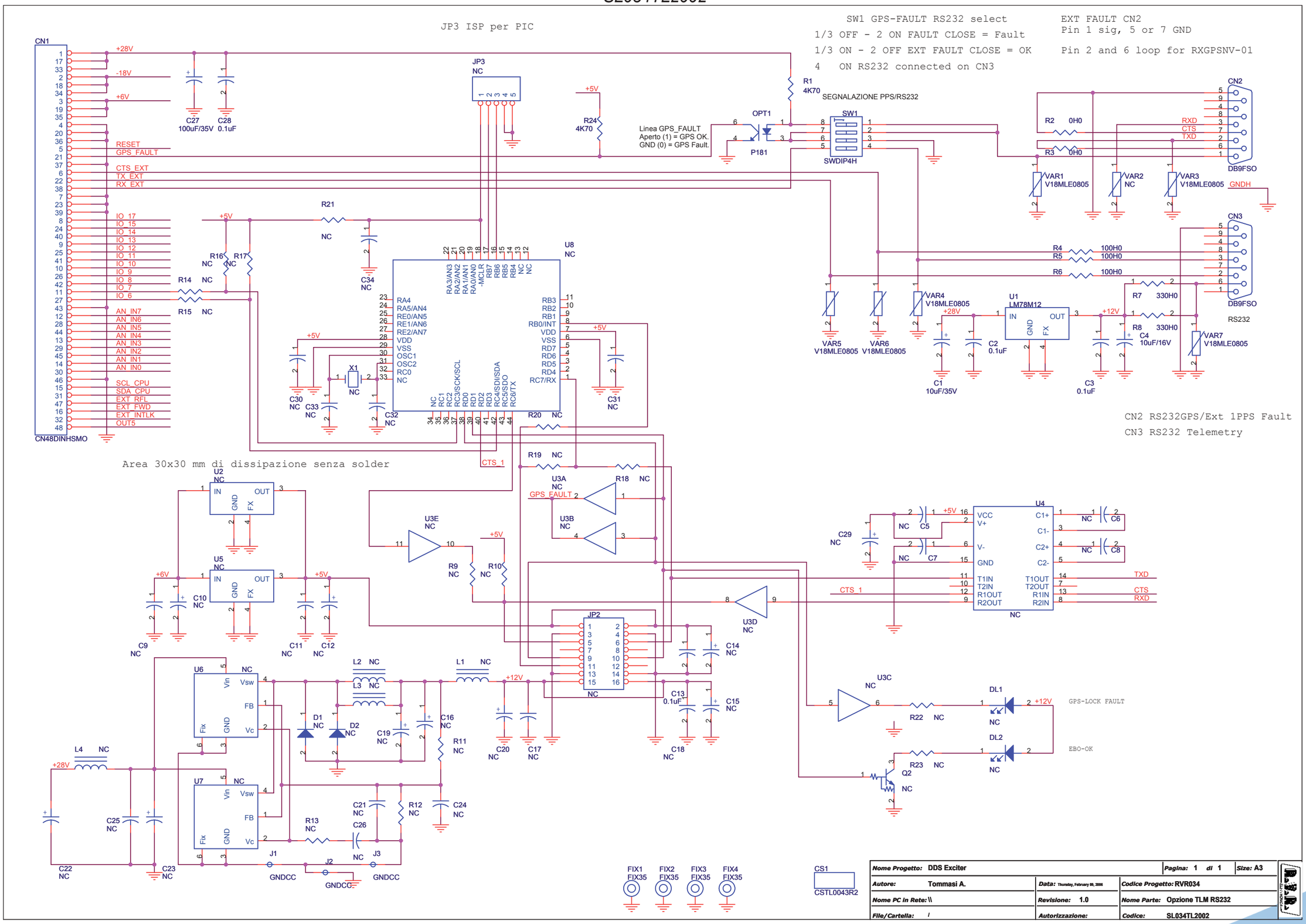


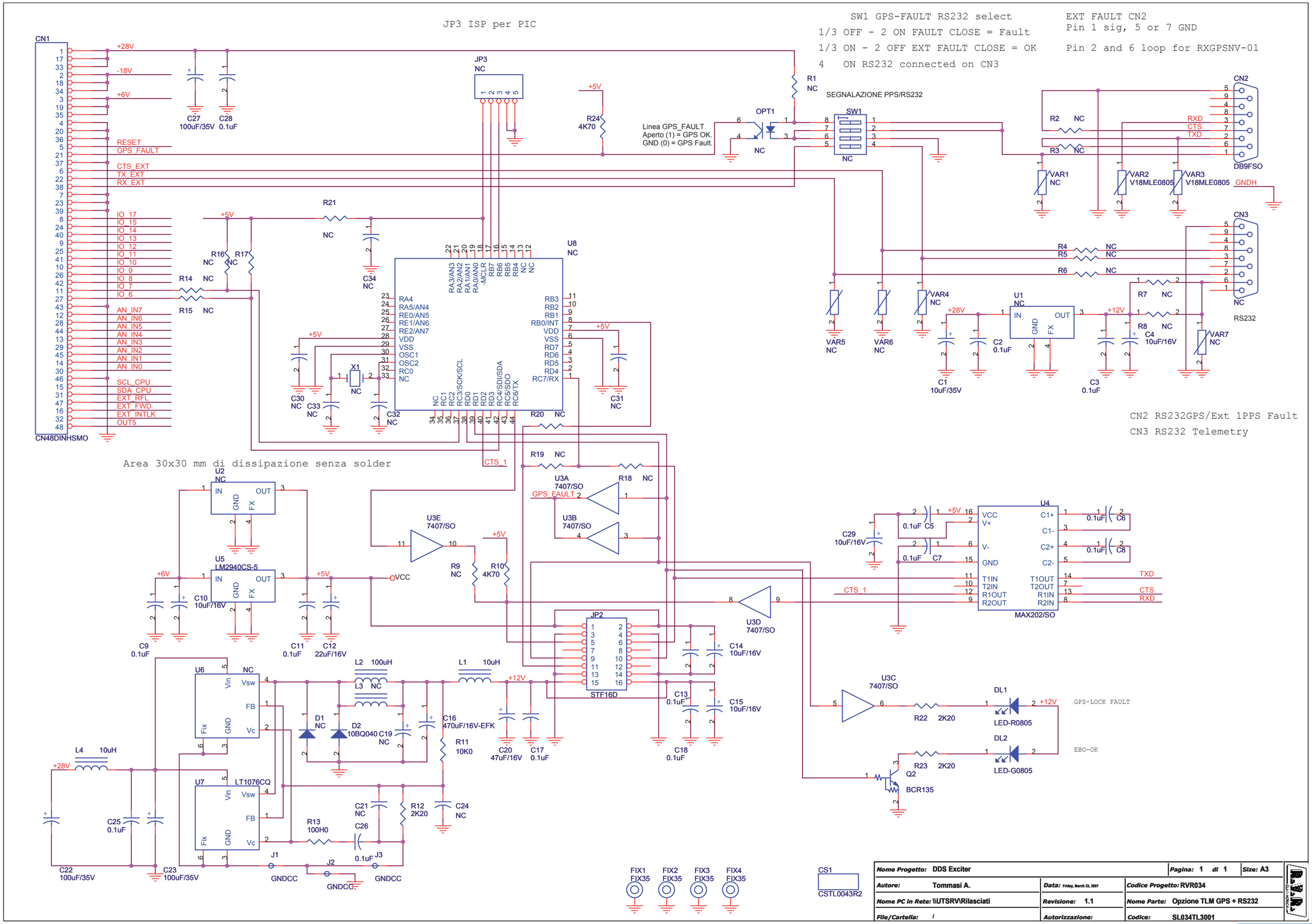
Tabella1

Opzione TLM RS232 Revised: Thursday, February 09, 2006
SL034TL2002 Revision: 1.0
DDS Exciter
RVR034
Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN1	CN48DINHSMO	Connettore M 48 poli DIN cs 90 gradi
2	2	CN2,CN3	DB9FSO	Connettore DB9 femm. cs 90°
3	1	CS1	CSTL0043R2	Circuito stampato
4	1	C1	10uF/35V	Cond. Elett. SMD d. 5mm
5	4	C2,C3,C13,C28	0.1uF	Cond. SMD 0805
6	1	C4	10uF/16V	Cond. Elett. SMD d. 4mm
7	17	C5,C6,C7,C8,C9,C11,C17, C18,C21,C24,C25,C26,C30, C31,C32,C33,C34	NC	Cond. SMD 0805
8	4	C10,C14,C15,C29	NC	Cond. Elett. SMD d. 4mm
9	1	C12	NC	Cond. Elett. SMD d. 5mm
10	1	C16	NC	Cond. Elett. SMD d. 10mm
11	1	C19	NC	Cond. Elettr. Dia 13 P5.08
12	3	C20,C22,C23	NC	Cond. Elett. SMD d. 6.3mm
13	1	C27	100uF/35V	Cond. Elett. SMD d. 6.3mm
14	2	DL1,DL2	NC	LED SMD 0805
15	1	D1	NC	Diodo plastico DO41
16	1	D2	NC	MELF SMD Diode
17	4	FIX1,FIX2,FIX3,FIX4	FIX35	Foro fissaggio 3.5mm
18	1	JP2	NC	Strip femmina 8+8 pin
19	1	JP3	NC	Strip maschio 5 pin a 90°
20	3	J1,J2,J3	GNDCC	Non e' un componente
21	2	L1,L4	NC	Ind. verticale SMD dia. 4 p 4.8
22	1	L2	NC	Induttanza EPCOS B82464-A4 10mmx10mm
23	1	L3	NC	Ind. verticale dia. 8 p 5
24	1	OPT1	P181	Optoisolatore SMD SO6
25	1	Q2	NC	Trans./Res. NPN SOT23
26	2	R1,R24	4K70	Res. SMD 0805 1%
27	2	R2,R3	0H0	Res. SMD 0805 1%
28	3	R4,R5,R6	100H0	Res. SMD 0805 1%
29	2	R7,R8	330H0	Res. SMD 2512 1%
30	15	R9,R10,R11,R12,R13,R14, R15,R16,R17,R18,R19,R20, R21,R22,R23	NC	Res. SMD 0805 1%
31	1	SW1	SWDIP4H	Dip switch 4 vie orizz.
32	1	U1	LM78M12	Stabilizzatore SMD DPAK
33	1	U2	NC	Stabilizzatore TO220
34	1	U3	NC	Hex buffer OC SMD SO14
35	1	U4	NC	RS232 Driver SMD SO16
36	1	U5	NC	Stabilizzatore SMD D2PAK
37	1	U6	NC	Regolatore switching
38	1	U7	NC	Regolatore switching SMD
39	1	U8	NC	TQFP44 SMD Microprocessor
40	6	VAR1,VAR3,VAR4,VAR5,VAR6, VAR7	V18MLE0805	ESD SMD protector
41	1	VAR2	NC	ESD SMD protector
42	1	X1	NC	Quarzo SMD HC49SMD

Pagina 1

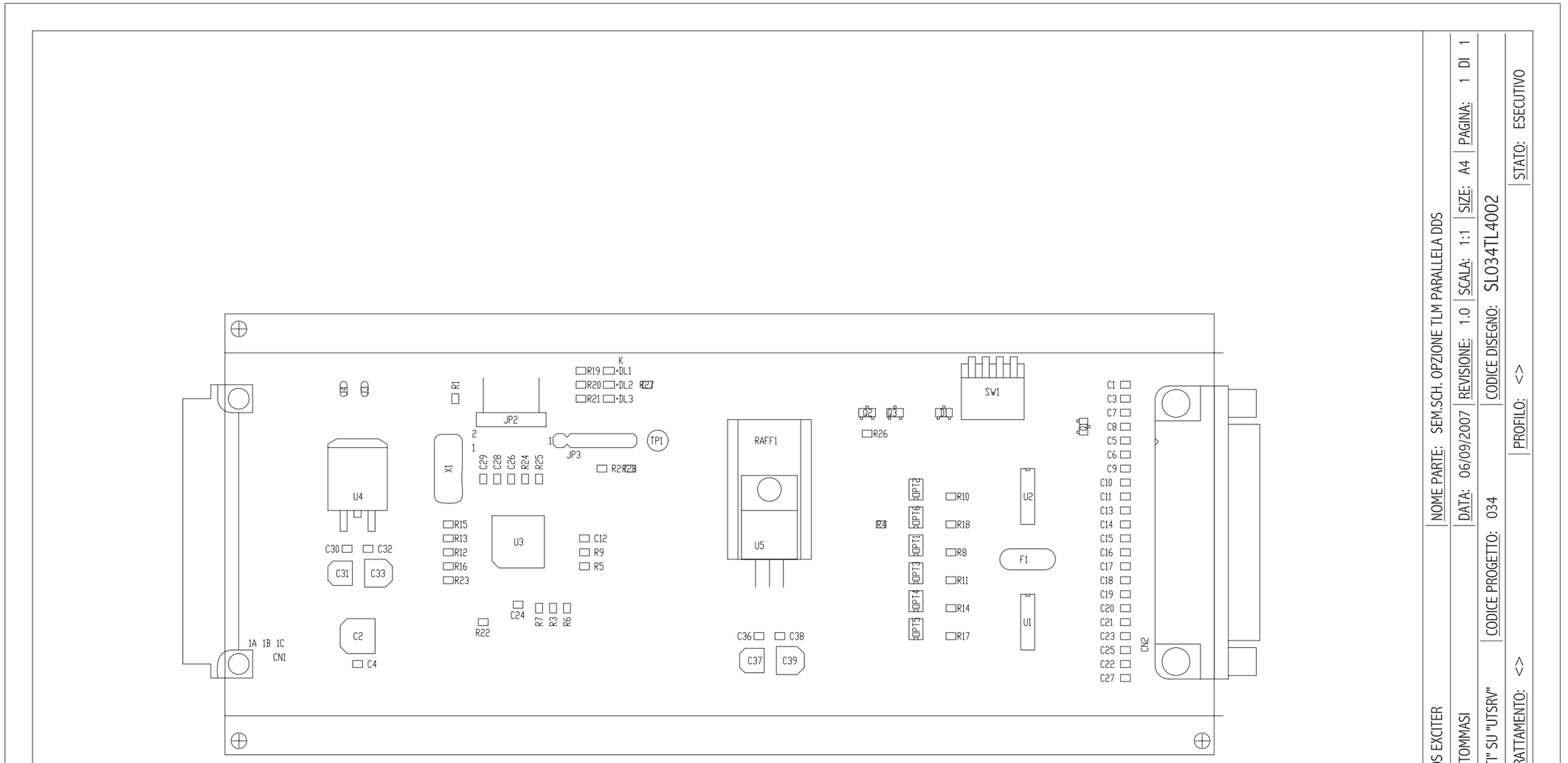
SL034TL3001



SL034TL3001

Opzione TLM RS232 - GPS Revised: 23/03/2007
SL034TL3001 Revision: 1.1
DDS Exciter
RVR034
Tommasi A.

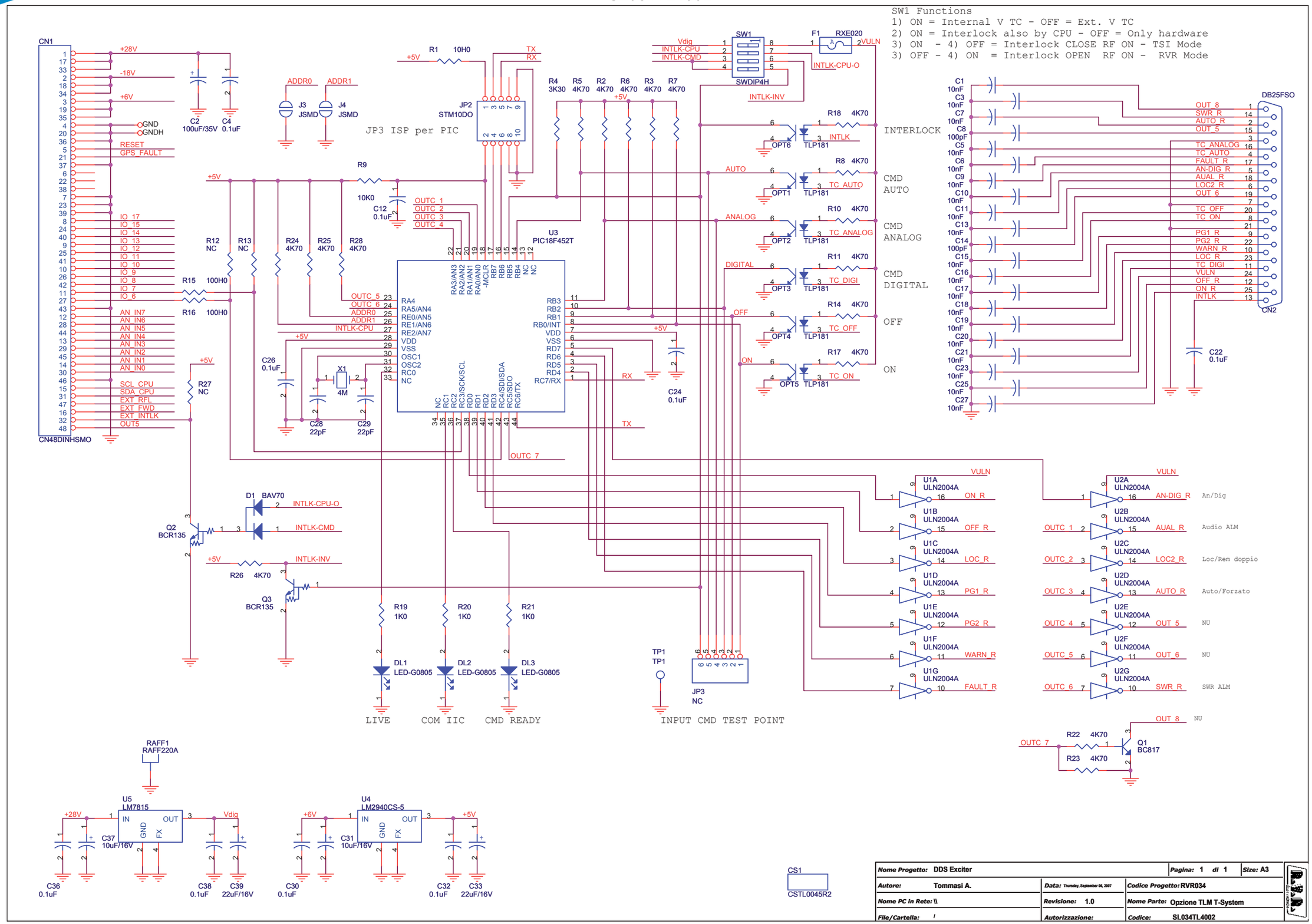
Item	Quantity	Reference	Part	Description
1	1	CN1	CN48DINHSMO	Connettore M 48 poli DIN cs 90 gradi
2	1	CN2	DB9FSO	Connettore DB9 femm. cs 90°
3	1	CN3	NC	Connettore DB9 femm. cs 90°
4	1	CS1	CSTL0043R2	Circuito stampato
5	1	C1	10uF/35V	Cond. Elett. SMD d. 5mm
6	14	C2,C3,C5,C6,C7,C8,C9,C11, C13,C17,C18,C25, C26,C28	0.1uF	Cond. SMD 0805
7	5	C4,C10,C14,C15,C29	10uF/16V	Cond. Elett. SMD d. 4mm
8	1	C12	22uF/16V	Cond. Elett. SMD d. 5mm
9	1	C16	470uF/16V-EFK	Cond. Elett. SMD d. 10mm
10	1	C19	NC	Cond. Elettr. Dia 13 P5.08
11	1	C20	47uF/16V	Cond. Elett. SMD d. 6.3mm
12	3	C22,C23,C27	100uF/35V	Cond. Elett. SMD d. 6.3mm
13	7	C21,C24,C30,C31,C32,C33,C34	NC	Cond. SMD 0805
14	1	DL1	LED-R0805	LED SMD 0805
15	1	DL2	LED-G0805	LED SMD 0805
16	1	D1	NC	Diodo plastico DO41
17	1	D2	10BQ040	MELF SMD Diode
18	4	FIX1,FIX2,FIX3,FIX4	FIX35	Foro fissaggio 3.5mm
19	1	JP2	STF16D	Strip femmina 8+8 pin
20	1	JP3	NC	Strip maschio 5 pin a 90°
21	3	J1,J2,J3	GNDCC	Non e' un componente
22	2	L1,L4	10uH	Ind. verticale SMD dia. 4 p 4.8
23	1	L2	100uH	Induttanza EPCOS B82464-A4 10mmx10mm
24	1	L3	NC	Ind. verticale dia. 8 p 5
25	1	OPT1	NC	Optoisolatore SMD SO6
26	1	Q2	BCR135	Trans./Res. NPN SOT23
27	15	R1,R2,R3,R4,R5,R6,R9,R14, R15,R16,R17,R18,R19,R20, R21	NC	Res. SMD 0805 1%
28	2	R7,R8	NC	Res. SMD 2512 1%
29	2	R10,R24	4K70	Res. SMD 0805 1%
30	1	R11	10K0	Res. SMD 0805 1%
31	3	R12,R22,R23	2K20	Res. SMD 0805 1%
32	1	R13	100H0	Res. SMD 0805 1%
33	1	SW1	NC	Dip switch 4 vie orizz.
34	1	U1	NC	Stabilizzatore SMD DPAK
35	1	U2	NC	Stabilizzatore TO220
36	1	U3	7407/SO	Hex buffer OC SMD SO14
37	1	U4	MAX202/SO	RS232 Driver SMD SO16
38	1	U5	LM2940CS-5	Stabilizzatore SMD D2PAK
39	1	U6	NC	Regolatore switching
40	1	U7	LT1076CQ	Regolatore switching SMD
41	1	U8	NC	TQFP44 SMD Microprocessor
42	5	VAR1,VAR4,VAR5,VAR6,VAR7	NC	ESD SMD protector
43	2	VAR2,VAR3	V18MLE0805	ESD SMD protector
44	1	X1	NC	Quarzo SMD HC49SMD



NOME PARTE: SEM.SCH. OPZIONE TLM PARALLELA DDS
DATA: 06/09/2007 | REVISIONE: 1.0 | SCALA: 1:1 | SIZE: A4 | PAGINA: 1 DI 1
CODICE PROGETTO: 034 | CODICE DISEGNO: SL034TL4002
PROFILO: <> | STATO: ESECUTIVO

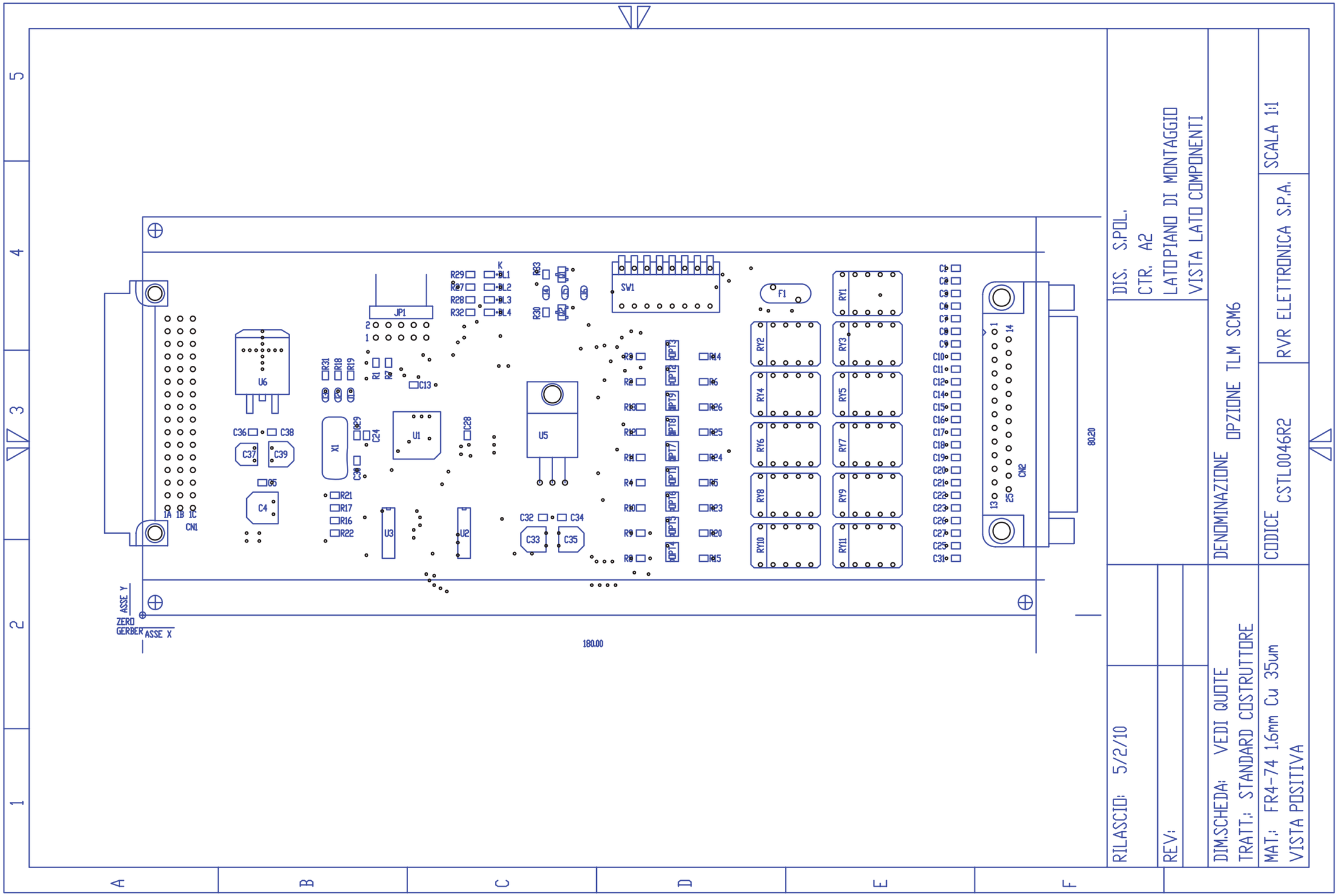
NOME PROGETTO: DDS EXCITER
AUTORE: A. TOMMASI
ARCHIVIAZIONE ELETTRONICA: "CARTELLA RILASCIATI" SU "UTSRV"
MATERIALE: <> | TRATTAMENTO: <>

SL034TL4002

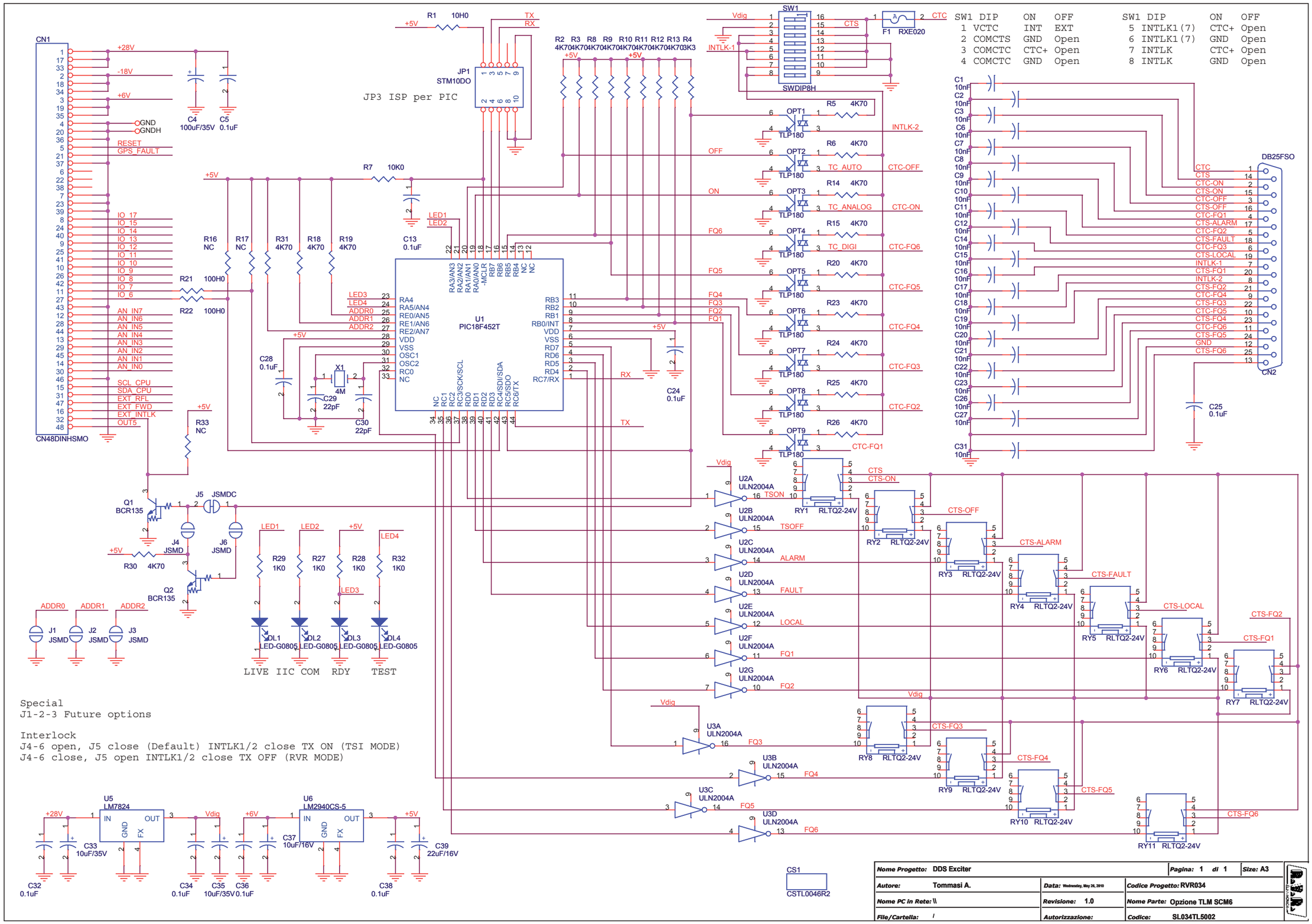


Opzione TLM T-System Revised: Thursday, September 06, 2007
SL034TL4002 Revision: 1.0
A. Tommasi
DDS Exciter
RVR034

Item	Quantity	Reference	Part	Description
1	1	CN1	CN48DINHSMO	Connettore M 48 poli DIN cs 90 gradi
2	1	CN2	DB25FSO	Connettore DB25 femm. cs 90°
3	1	CS1	CSTL0045R2	Circuito stampato
4	19	C1,C3,C5,C6,C7,C9,C10, C11,C13,C15,C16,C17,C18, C19,C20,C21,C23,C25,C27	10nF	Cond. SMD 0805
5	1	C2	100uF/35V	Cond. Elett. SMD d. 6.3mm
6	9	C4,C12,C22,C24,C26,C30, C32,C36,C38	0.1uF	Cond. SMD 0805
7	2	C8,C14	100pF	Cond. SMD 0805
8	2	C28,C29	22pF	Cond. SMD 0805
9	2	C31,C37	10uF/16V	Cond. Elett. SMD d. 4mm
10	2	C33,C39	22uF/16V	Cond. Elett. SMD d. 5mm
11	3	DL1,DL2,DL3	LED-G0805	LED SMD 0805
12	1	D1	BAV70	Doppio Diodo SMD SOT23
13	1	F1	RXE020	Fusibile autorip. 7mm
14	1	JP2	STM10DO	Strip maschio 10 pin doppia fila 90
15	1	JP3	NC	Strip maschio 6 pin
16	2	J3,J4	JSMD	Pad SMD a saldare
17	6	OPT1,OPT2,OPT3,OPT4,OPT5, OPT6	TLP181	Optoisolatore SMD SO6
18	1	Q1	BC817	Trans. NPN SOT23
19	2	Q2,Q3	BCR135	Trans./Res. NPN SOT23
20	1	RAFF1	NC	Dissipatore TO220 25x15 scasso
21	1	R1	10H0	Res. SMD 0805 1%
22	17	R2,R3,R5,R6,R7,R8,R10, R11,R14,R17,R18,R22,R23, R24,R25,R26,R28	4K70	Res. SMD 0805 1%
23	1	R4	3K30	Res. SMD 0805 1%
24	1	R9	10K0	Res. SMD 0805 1%
25	3	R12,R13,R27	NC	Res. SMD 0805 1%
26	2	R15,R16	100H0	Res. SMD 0805 1%
27	3	R19,R20,R21	1K0	Res. SMD 0805 1%
28	1	SW1	SWDIP4H	
29	1	TP1	NC	Test point
30	2	U1,U2	ULN2004A	Seven Inv. Buffer OC
31	1	U3	PIC18F452T	TQFP44 SMD Microprocessor
32	1	U4	LM2940CS-5	Stabilizzatore SMD D2PAK
33	1	U5	LM7815	Stabilizzatore TO220
34	1	X1	4M	Quarzo SMD HC49SMD


DIS. S.POL.
CTR. A2
LATO PIANO DI MONTAGGIO
VISTA LATO COMPONENTI
DENOMINAZIONE OPZIONE TLM SCM6
SCALA 1:1
RVR ELETTRONICA S.P.A.
CODICE CSTL0046R2
DIM.SCHEDA: VEDI QUOTE
TRATT.: STANDARD COSTRUTTORE
MAT.: FR4-74 1.6mm Cu 35um
VISTA POSITIVA
RILASCIO: 5/2/10
REV:
180.00
80.20
ASSE Y
ASSE X
ZERO GERBER
CN1
CN2
SW1
F1
JP1
U1
U2
U3
U5
U6
X1

SL034TL5002



Opzione TLM SCM6 Revised: 26/05/2010
SL034TL5002 Revision: 1.0
A. Tommasi
DDS Exciter
RVR034

Item	Quantity	Reference	Part	Description
1	1	CN1	CN48DINHSMO	Connettore M 48 poli DIN cs 90 gradi
2	1	CN2	DB25FSO	Connettore DB25 femm. cs 90°
3	1	CS1	CSTL0046R2	Circuito stampato
4	23	C1,C2,C3,C6,C7,C8,C9,C10, C11,C12,C14,C15,C16,C17, C18,C19,C20,C21,C22,C23, C26,C27,C31	10nF	Cond. SMD 0805
5	1	C4	100uF/35V	Cond. Elett. SMD d. 6.3mm
6	9	C5,C13,C24,C25,C28,C32, C34,C36,C38	0.1uF	Cond. SMD 0805
7	2	C29,C30	22pF	Cond. SMD 0805
8	2	C33,C35	10uF/35V	Cond. Elett. SMD d. 5mm
9	1	C37	10uF/16V	Cond. Elett. SMD d. 4mm
10	1	C39	22uF/16V	Cond. Elett. SMD d. 5mm
11	4	DL1,DL2,DL3,DL4	LED-G0805	LED SMD 0805
12	1	F1	RXE020	Fusibile autorip. 7mm
13	1	JP1	STM10DO	Strip maschio 10 pin doppia fila 90
14	5	J1,J2,J3,J4,J6	JSMD	Pad SMD a saldare
15	1	J5	JSMDC	Pad SMD a saldare chiuso
16	9	OPT1,OPT2,OPT3,OPT4,OPT5, OPT6,OPT7,OPT8,OPT9	TLP180	Optoisolatore SMD SO6
17	2	Q1,Q2	BCR135	Trans./Res. NPN SOT23
18	11	RY1,RY2,RY3,RY4,RY5,RY6, RY7,RY8,RY9,RY10,RY11	RLTQ2-24V	Rele' TQ2
19	1	R1	10H0	Res. SMD 0805 1%
20	21	R2,R3,R5,R6,R8,R9,R10, R11,R12,R13,R14,R15,R18, R19,R20,R23,R24,R25,R26, R30,R31	4K70	Res. SMD 0805 1%
21	1	R4	3K3	Res. SMD 0805 1%
22	1	R7	10K0	Res. SMD 0805 1%
23	3	R16,R17,R33	NC	Res. SMD 0805 1%
24	2	R21,R22	100H0	Res. SMD 0805 1%
25	4	R27,R28,R29,R32	1K0	Res. SMD 0805 1%
26	1	SW1	SWDIP8H	Dip switch 8 vie Pianof.
27	1	U1	PIC18F452T	TQFP44 SMD Microprocessor
28	2	U2,U3	ULN2004A	Seven Inv. Buffer OC
29	1	U5	LM7824	Stabilizzatore TO220
30	1	U6	LM2940CS-5	Stabilizzatore SMD D2PAK
31	1	X1	4M	Quarzo SMD HC49SMD